

Campus India

AN APPRAISAL
OF AMERICAN COLLEGE PROGRAMS
IN INDIA

HENRY C. HART

Michigan State University Press

Copyright © 1961

Michigan State University Press

Library of Congress Catalog Card Number: 60-16416

Manufactured in the United States of America

Contents

CHAPTER 1	<i>Varieties of College Work in India</i>	1
2	<i>The Cultural Context</i>	18
3	<i>Land Grant Colleges Individuals and Their Work</i>	36
4	<i>Land Grant Colleges Education Policy</i>	66
5	<i>Teacher Training and Domestic Science</i>	94
6	<i>A First Lesson in Overseas Social Science Research</i>	122
7	<i>A Promising Social Research Program</i>	137
8	<i>Students and Recent Graduates</i>	152
9	<i>Conclusions The Jobs Being Done</i>	170
10	<i>Conclusions How the Job is Done</i>	180
APPENDIX A	<i>Two Church Mission Programs</i>	205
APPENDIX B	<i>American Faculty Grantees Under the Fulbright Program</i>	213

CHAPTER 1

Varieties of College Work in India

In March 1959, American colleges and universities had forty-nine staff members at work in India. In addition, two deans were visiting the country to plan future work in India for their institutions. The forty-nine Americans were engaged in nine different programs, quite varied in subject. They had been sent by eleven American institutions.

The single characteristic which distinguishes the men and women whom we are discussing from other American students and faculty people in India is that these forty-nine had been sent out by colleges in America (or a closely related association, in the Oberlin case). They were enlisted not only *from* American colleges (as were scores of Fulbright, foundation, and direct government employees) but *by* American colleges. It is the decisions that were made to send them, decisions by American college deans and presidents, that define the scope of this study: decisions of what work to undertake, how to do it with what kind of people, what relations to establish with Indian institutions, and above all, whether to work in India at all.

Alongside these forty-nine Americans were others, including some on leave from American faculty positions as well as graduate students of American colleges, about whom we are not directly concerned. They were drawn to India for individual research, teaching or study, or employed upon a project not conducted by an American college. Curiously enough, it is not possible to say exactly how many of these there were in

REPRESENTATIVES OF AMERICAN COLLEGES IN INDIA, 1959

<i>Sponsor and Field of Work</i>	<i>College or University</i>	<i>Staff in India March 1959</i>
Government Funds		39
International Cooperation Administration-Government of India		
Agriculture	Kansas State	7
	Ohio State	6
	Tennessee	4
	Illinois	3
	Missouri	3
Education	Ohio State	4
	Teachers College, Columbia	2
Engineering	Wisconsin	6
Home Economics	Tennessee	4
Non-government Funds		10
Ford Foundation		
Economics	Massachusetts Institute of Technology	3
	Yale	1
Oberlin-Shansi Memorial Association		
English, student activities	Oberlin	4
Seventh Day Adventist Church		
Medicine	College of Medical Evangelists	2
Total		49

India American consular authorities register only such American citizens who care to make themselves known, the Indian visa-granting offices do not report numbers of visiting Americans in the categories we have defined. We can be sure, however, that the college personnel sent out to India on college-administered programs are greatly exceeded by these other types *

It will be well, therefore, before examining the organized projects of American colleges in India, to observe the alternative auspices for doing similar work. We will be able thus to estimate the relative importance of organized programs in the whole scene, we may also hit upon suggestive types and methods of work not yet tried out in organized college programs. Aside from the staff of the United States government itself, through the International Cooperation Administration, the leading alternatives are (1) the Christian missions, (2) the Fulbright program, and (3) the philanthropic foundations. A brief examination will be made of each.

MISSION COLLEGES

Until ten years ago missions provided the only way by which Americans taught regularly in Indian colleges, or planted in India new academic disciplines or institutions. Since then, the rapid growth of government and foundation supported programs have crowded church mission efforts from public attention. Appendix A gives a selective account of two existing mission colleges in India which may correct this impression. Allahabad Agricultural Institute and Vellore Christian Medical College.

* In the Bombay consular district, one of four in India, the register of Americans included thirty five who might belong to college faculties (No students of college age registered). Nineteen designated themselves "Missionary" and gave the addresses of colleges in India. Sixteen put themselves down as "Biologist," "Home Economist," "Physicist" and so forth, as well as "Professor." This may be compared to the twelve college people who were in this consular district on the organized American college programs which were surveyed.

are not chosen here for their representativeness, although they are of top quality among the mission institutions, but because they provide the most relevant analogies to the American college programs which we are surveying. Even by themselves, these two cases demonstrate that mission board policies and methods of work could get highly trained Americans to India, and in some fields still do. They show that these Americans maintained relationships in India so that certain scientific and educational advances resulted, and seem lasting. Whether these results were of the type required in the independent republic of India is of course a question to which we must recur.

Meanwhile, it is possible to summarize in general terms the conclusions demonstrated by the college work of American missionaries in India up to Independence in 1947.

(1) Mission education played a significant part in the revolutionary total impact of Europe and America on India. Though American institutions were mostly founded later, English and Scottish Christian colleges were already in existence when India's first universities were chartered at Calcutta, Bombay and Madras in 1857. The pre-Independence enrollment of Christian colleges was about one tenth of the total.*

The fateful decision of the British to use the English language and English content in Indian education opened the door to this influence † In a deeper sense, this decision only accentuated the underlying historical process. Two different cultures came in contact, one dynamic, the other passive. Christian colleges, no less than the American than the British, operated in India as carriers of the dynamic culture. The most enterprising Indians looked to them, until the 1920's, as doorways to India's future.

(2) Though sharing the dynamism of the imperial power, Christian colleges also represented its pluralism. In important respects they stood independent of the British administration,

* "The Council on Christian Higher Education in Asia," *Asia Colleges Newsletter* (New York, November, 1958), p. 7.

† Bruce T. McCully, *English Education and the Origins of Indian Nationalism* (New York thesis published by Columbia University, 1940) is a history of this decision and its effects.

capable of exercising critical judgments upon it Many future leaders of Indian nationalism got their first intellectual taste of freedom reading John Stuart Mill, or the lives of Mazzini and Louis Kossuth under mission teachers The fleeting and not very important reaction of the young Indian nationalists of the 1930's and 1940's toward the government colleges left their regard for Christian colleges high, as it is with one or two exceptions today

(3) The impact of the mission colleges was not only the impact of specific Western ideas and institutions Narrowing our focus now to American mission colleges, we can see that they were centers of creativity within the Indian context, giving rise to programs and teaching content not American, and not traditionally Indian, but meeting India's needs to grow Mason Vaugh's cheap, sturdy, practical "Allahabad plow," or Dr Paul Brand's Leprosy Rehabilitation Center at Vellore represent such creativity

(4) The ability of mission education at its best to maintain a character which conserved universal—not Western, not Indian—values in the Indian social context grew out of the ways in which it was conducted in India There was great scope for the vision and determination of the individual institution founder His vision of the institution he built came after some years of experience in India Far from being a creation of his own American professional education, it sometimes drew him to that education Far from being the executor of an American plan, he went back to America to raise money for the plan he had thought out in India

The men and women whom the founder brought out to establish the departments and major programs of his institution spent long periods of years in India, ten years was usually the minimum They learned the language of their part of the country Their interpretation of its culture ranged from the *Memsahib* who judged India by her domestic servants to truly scholarly understanding, but the expectation was certainly that they would produce scholarly work in their professional fields upon Indian materials

These American professors almost always regarded it as their function to develop Indian successors to carry on when they left. In these successors they looked not only for technical competence, usually perfected by graduate study in America, but also for certain traits of character which have mostly to be developed early in life

These factors were together responsible for an institutional "character" clearly visible in some, though not all, of these colleges. And it is a remarkable quality of the best of them that the character has survived beyond the active life of the pioneer founder. In a few mission colleges it has been successfully institutionalized. The whole process, however, has taken the full span of a working life of thirty to forty years—ten years for the concept of the institution to germinate in the founder's thinking, ten or fifteen years to get land, money, and staff, another ten or fifteen years for department heads brought out from America to establish their programs and train their successors.

(5) By the time of Partition, there were forty three Protestant colleges of various types in India, about half of them founded and partly supported by American missions. But though the best of them had demonstrated effectiveness in meeting educational needs which in India were greater than ever, the mission movement as a general vehicle for American contribution to Indian education had reached an impasse. Partly, this was the outcome of the consolidation of nationalism in the new nation, though India staunchly preserved religious freedom. Most of the reasons are more complex.

As everywhere in the world, the costs of college education are rising in India, mission finances are inelastic, and reliance upon government support quite properly requires a divorce of the propagation of Christianity from the public educational programs of the colleges. It also takes away in practice much operating flexibility. In a deeper sense, the impasse results from a discrepancy in the two purposes of the mission colleges—to teach liberal arts, agriculture or medicine, and to draw students and faculty members toward Christianity. This discrepancy did

not appear, any more in India than in America, until secular education in all fields became accessible throughout the country It is more acute for a minority religion, most of whose cultural roots are foreign, and whose adherents consequently feel they must keep spreading it to keep it alive The dilemma shows itself, for instance, in faculty appointments As non Christian students enter mission colleges, and as graduate training becomes available elsewhere, it may very well happen that the best candidate to replace an American missionary professor, when he retires, is a non-Christian The non-Christian can be appointed, without conflict of purposes, unless the vacancy is at the head of a department or college In those positions, too many non-Christians might jeopardize the "Christian character" of the institution—its original purpose and basis of much of its financial support To appoint a less qualified Christian, however, means compromising the principle of equal opportunity for all individuals which has been one of the institution's finest values The dilemma is real

The impasse will probably be negotiated successfully by institutions as strong as those presented in the Appendix But clearly, after Independence, missions were not promising channels for the greatly enlarged flow of scientific and technical knowledge and educational resources between America and India

Almost at once, broad new channels opened This was possible since Independence opened out to India contacts with the world which had formerly been directed to Britain alone It was desirable since India, like America, is a secular state and a plural society Many of the channels were specifically American because America happened, also, at this very time, to be enlarging her horizons of governmental, philanthropic, and educational work The programs that were extended to India were thus in large part as new to America as they were to India

THE FULBRIGHT PROGRAM

The first exchange of college people between India and the United States under the Fulbright Act took place in 1950-51. Through the academic year 1958-59 the program had sent two hundred and eighty-four Americans to India and eight hundred and fifty-nine Indians to the United States. About two-fifths of the Americans have been faculty people appointed to lecture in Indian colleges, or in a much smaller number of cases to do individual research. Two-fifths have been graduate students, another fifth high school or elementary school teachers.

Appendix B is a brief analysis of the American faculty grantees, based almost entirely on their own terminal reports left in the sponsoring office in India. This is the part of the program which is most comparable to the organized programs of American colleges which we are studying.

The Fulbright program in India has achieved a balance in the academic fields of its grantees. Social science, humanities, education, other applied and professional fields were about equally represented. There were few natural scientists, these were supported most adequately by the Indian and American governments directly. It was a program benefitting liberal education as much as technical development. It was not, however, a program predominantly to contribute to scholarly knowledge. Almost half of the Fulbright senior grantees went to India to start a new department or course and thus gave assistance to Indian colleges. Only one-fourth went to do research.

With few exceptions, Fulbright grantees stay one year. Their final reports expressed some conviction that the time was too short, especially where the task of the grantee was to establish a new department in an Indian college.

Fulbright appointees are an extremely mixed bag as far as their professional qualifications are concerned. A good number come from small colleges without claim to academic eminence. But the jobs to which some Fulbright lecturers are put are no more exacting; they may be asked to give a course of lectures in one or several Indian colleges, or to do regular undergraduate

or graduate teaching A vacancy is accepted to be filled by a Fulbright appointment upon consultation of the head of the Indian college and the executive secretary of the Fulbright board in New Delhi Neither a specialized survey of the field of work, nor any detailed planning of the sequence of steps needed to develop it normally precede this decision The unit of planning thus tends to be the individual position, or at most the department and the goal for change is not long-range This slight degree of planning distinguishes this program, of course, from the organized college programs we will study

THE FOUNDATIONS

In India The Rockefeller Foundation, which had been awarding fellowships for foreign study to Indian specialists, principally in the field of medicine, for a quarter century, began more highly organized activities in India after Independence Beginning in 1952, the Foundation helped the Deccan College, Poona, to pioneer in the study and teaching of Indian languages through the methods of modern descriptive linguistics American junior and senior linguists are sent to India under the program, Indian fellows in linguistics study at American universities Deccan College administers the program with the help of an American committee which arranges fellowships in the United States for Indian linguists A plan for the systematic development of this discipline in India guides the program

Two of the Rockefeller Foundation's world wide operating programs are now functioning in India One is represented by the Virus Research Center, Poona, operated jointly with the Indian Council of Medical Research The other is the development of improved varieties of corn, sorghum and millet, stemming from the Foundation's pioneer work in Mexico in 1943 The agriculture program is associated with the Indian Agricultural Research Institute, New Delhi, which the Foundation is assisting in its development of Ph D level training The Foundation now has two Americans of its own staff at the virus

center and four in the agriculture program. For some years its medical division maintained an office in India.

The Ford Foundation began to channel its enormous resources into overseas development (among other purposes) at the very time India began to plan her economic and social future. Its president, Paul Hoffman, laid the groundwork by visiting India and talking with Prime Minister Nehru in 1951, the first year of India's five Year Plan and the second year of her constitution. Since then, the Foundation has given crucial financial support for many of the new development ventures of the government of India. The most fateful of these is probably the "Community Projects," India's term for a scheme of self help by each of the 550,000 villages of the country. Stimulus and assistance on a variety of village problems from rice-growing to the teaching of the alphabet is provided by a nation wide service of "village level workers." They had to be recruited, trained and organized from scratch. The Ford Foundation representatives consulted with the planners of this vast program from its early months. The Foundation paid the rupee costs of fifteen pilot community projects in 1952-54, for three years it financed thirty centers to train the village level workers, it provided the Planning Commission with consultants in anthropology and agricultural economics to begin appraising the program as it grew. The Foundation has played an analogous role in India's development of small industries, economic and social-science research, the study of public administration, and the improvement of secondary and village primary school teaching.

The programs which the Foundation has been asked to assist might be considered delicate ones, in that through them the government enlists the enthusiasm and energies of the people in the nation's plans. The vital importance, yet delicacy of these subjects of assistance is both a result of, and a reason for, the Foundation's method of work in India.

Unlike the Rockefeller—or any other United States Foundation, the Ford Foundation has one overall representative in India. Douglas Ensminger, who has held this position from the start, has drawn certain conclusions regarding the Indian situa-

tion and the methods of working in it Perhaps India was once at a stage when foreigners built institutions in the country, and that may still be true of neighboring countries, but India is not at that stage now India's government leaders will decide the major pattern of her institutional changes But the situation they confront is in constant flux, as changes on all sides have their impact on one another A program of major assistance can be of wide and lasting consequence in this situation, therefore, to the extent that it is planned in close understanding with these leaders Such close relations Dr Ensminger has achieved

In a fast-moving context it is not easy for these top policy-makers to specify the particular kind of assistance they need, or even the precise problem to be solved At the planning stage, Dr Ensminger has found that a team of consultants brought to India for a few weeks or months may help them clarify the problem areas There is great advantage in drawing the team not only from a variety of American institutions, but also from one or two other countries, perhaps Japan, Sweden, Italy, or the United Kingdom This avoids premature commitment to any one American institution as a source of later assistance, as well as the temptation to transplant one country's experience bodily to another

If a development is to be planned, usually by a government ministry or the Planning Commission, on which outside help is desired, the Foundation considers whether it is an appropriate subject for a grant In the early years, the Foundation defined its special role as helping to initiate programs for which regular government of India financing might be delayed, and helping "test out" development proposals which could only be given Indian government financing if they proved workable While Dr Ensminger does not carry the Ford Foundation's checkbook, he is nevertheless able to respond to requests for help much more quickly, and flexibly in such matters as salaries of consultants, than any other American agency

All this helps explain why the Ford Foundation in India has not used an American university as a contractor in any major assistance program It prefers to make grants to government

ministries (perhaps helping them in recruiting suitable consultants from abroad), or to Indian educational or research institutions. Lately, it has directly administered a project—a pilot city planning effort for the new and old cities of Delhi—for which there was no Indian agency to take charge. Dr Ensminger vigorously resisted the proposal to contract for the job with an American school of city planning. No such contractor, he felt, could be so clear as to what was needed as one who had been in constant touch with the germination of the project in Indian government circles, nor could any feel so completely responsible as he does for its success.

On the other hand, Dr Ensminger sees why it may be quite appropriate for the United States government to bring in universities as instruments of technical assistance. For such technical assistance may very well be upon projects which are definable in advance, and which do not need to respond quickly to the evolving policy thinking of the top government leaders. Dr Ensminger calls these "straight line" programs. They can be planned only as part of a more flexible and continuous relationship of assistance, but for that part they may be the appropriate means.

In the United States Foundations also support teaching, research and education activities of American colleges concerning India which may or may not involve the colleges working in India. In 1947, the Carnegie Foundation gave a grant to Cornell University to finance a study of culture changes in four areas of the world. It permitted Dr Morris Opler to begin work in India prior to undertaking the larger project which is the subject of one of our case studies in Chapter 6. The Ford Foundation supported that later study. It also gave three separate grants to Massachusetts Institute of Technology to carry on studies of communications, economic and political development. These will be analyzed in Chapter 7.

The two characteristics of these programs which distinguish them from all others which we have considered are (a) that the initiative for them comes from the college, not the sponsor, and (b) that the decision whether to support them is taken

without much reference to helping India, or to India's needs. The foundation is not a very active planner of these programs, much of the financial support may come from the colleges. The foundation's money contribution to these projects may be several hundred thousand dollars, but so may the college's. The purpose is American education, not Indian development. The foundation's decision is made by its New York, not its Indian, office. The aims of the two offices may not manifest the same order of priorities.

From the viewpoint of a college conducting such a project concerning India, finally, it is quite incidental whether its staff members go to India on project money or on individual grants. It is incidental whether Indians brought to associate with the project come on project or Fulbright financing. This rather technical distinction makes these projects marginal to this study. Otherwise much would be said in this survey of the fruitful teaching and research projects on India of the University of California at Berkeley, the University of Chicago, and the University of Pennsylvania.

ICA—UNIVERSITY CONTRACTS

In January 1952, after the dispatch of two hundred million bushels of American wheat to hard pressed India, the two nations entered a general agreement for technical cooperation. The United States undertook to meet dollar costs of development projects to be agreed upon, the government of India meeting the rupee costs. The office in India of the International Cooperation Administration which administers the program is the Technical Cooperation Mission. Like the Ford Foundation, TCM accepts India's Five Year Plans as setting the priorities of development schemes to be assisted. TCM can, as the Ford Foundation cannot, provide large quantities of commodities, for instance steel, fertilizer, and surplus wheat.

To serve the development projects jointly agreed upon with

ministries (perhaps helping them in recruiting suitable consultants from abroad), or to Indian educational or research institutions. Lately, it has directly administered a project—a pilot city planning effort for the new and old cities of Delhi—for which there was no Indian agency to take charge Dr Ensminger vigorously resisted the proposal to contract for the job with an American school of city planning. No such contractor, he felt, could be so clear as to what was needed as one who had been in constant touch with the germination of the project in Indian government circles, nor could any feel so completely responsible as he does for its success.

On the other hand, Dr Ensminger sees why it may be quite appropriate for the United States government to bring in universities as instruments of technical assistance. For such technical assistance may very well be upon projects which are definable in advance, and which do not need to respond quickly to the evolving policy thinking of the top government leaders. Dr Ensminger calls these "straight line" programs. They can be planned only as part of a more flexible and continuous relationship of assistance, but for that part they may be the appropriate means.

In the United States Foundations also support teaching, research and education activities of American colleges concerning India which may or may not involve the colleges working in India. In 1947, the Carnegie Foundation gave a grant to Cornell University to finance a study of culture changes in four areas of the world. It permitted Dr Morris Opler to begin work in India prior to undertaking the larger project which is the subject of one of our case studies in Chapter 6. The Ford Foundation supported that later study. It also gave three separate grants to Massachusetts Institute of Technology to carry on studies of communications, economic and political development. These will be analyzed in Chapter 7.

The two characteristics of these programs which distinguish them from all others which we have considered are (a) that the initiative for them comes from the college, not the sponsor, and (b) that the decision whether to support them is taken

without much reference to helping India, or to India's needs. The foundation is not a very active planner of these programs, much of the financial support may come from the colleges. The foundation's money contribution to these projects may be several hundred thousand dollars, but so may the college's. The purpose is American education, not Indian development. The foundation's decision is made by its New York, not its Indian, office. The aims of the two offices may not manifest the same order of priorities.

From the viewpoint of a college conducting such a project concerning India, finally, it is quite incidental whether its staff members go to India on project money or on individual grants. It is incidental whether Indians brought to associate with the project come on project or Fulbright financing. This rather technical distinction makes these projects marginal to this study. Otherwise much would be said in this survey of the fruitful teaching and research projects on India of the University of California at Berkeley, the University of Chicago, and the University of Pennsylvania.

ICA—UNIVERSITY CONTRACTS

In January 1952, after the dispatch of two hundred million bushels of American wheat to hard pressed India, the two nations entered a general agreement for technical cooperation. The United States undertook to meet dollar costs of development projects to be agreed upon, the government of India meeting the rupee costs. The office in India of the International Cooperation Administration which administers the program is the Technical Cooperation Mission. Like the Ford Foundation, TCM accepts India's Five Year Plans as setting the priorities of development schemes to be assisted. TCM can, as the Ford Foundation cannot, provide large quantities of commodities, for instance steel, fertilizer, and surplus wheat.

To serve the development projects jointly agreed upon with

the Indian government, the TCM set out from the beginning hiring American technicians on its own payroll. Even in 1959, it had sixty-one such American technicians working in India.

As early as 1952, however, TCM also had a university contract. Dr Arthur T Mosher, the American agricultural educator who had up to that time been principal of Allahabad Agricultural Institute, took the initiative in enlisting his alma mater, the University of Illinois, in providing certain faculty members to Allahabad, and training certain Allahabad faculty members in the United States. A United States government contract financed the exchange. This did not, as we shall see, set the pattern for agricultural education contracts in India. It did lead on to an agreement the following year by which the University of Illinois was to supply specialists in engineering subjects to the Indian Institute of Technology near Calcutta. Also in 1953, a contract was entered with the University of Wisconsin to strengthen the teaching staff at six Indian engineering and technological institutions.

By 1955 the university contract device had become a standard instrumentality of ICA internationally, and in India contracts were entered in the fields of agricultural education, secondary school teacher training, home economics, social work education, and engineering education. By 1959 many of these contracts had run their three year course, and renewals or extensions being negotiated.

In their origin and administration, ICA university contracts follow a typical series of steps. In their continuing discussions with executives of Indian government ministries, TCM officers in Delhi learn of a need for assistance involving education in some form. Perhaps they may at this stage employ a consulting team of Indian and American specialists to explore the subject; this has been done in about half the instances and always to good effect. The TCM officer, or his counterpart in Washington, now invites chosen universities in the United States to consider providing the needed services by contract. If seriously interested, the American university sends to India a survey team. The team typically consists of an associate dean and a professor

who will later become the overseas leader of the university's team of specialists In the course of one or two months, they learn intentions of the Indian ministry and visit the institutions to which advice and assistance will go They find out there what specific American skills are required, what equipment may be needed to permit them to work effectively, and what arrangements can be made for the housing and schooling of American families

A contract is then negotiated providing so many man years of the services of American technicians, a stipulated quantity of books and equipment, and the advanced training of so many Indian faculty members at the home campus All are to be provided by the contracting university at government expense and within stipulated government rules Negotiation may take from a few weeks to two years Selection of American technicians may begin in advance When the contract is signed they go to India with the group leader The home campus coordinator purchases the needed equipment and arranges for the graduate training at the home campus of the Indians who are selected shortly after the American team arrives at their institutions Americans usually serve two years in India, Indians study one year in the United States If the contract is for three years, a single team of Americans will be sent, if four years, there will be replacements or the dispatch of specialists in other fields There has been a tendency for university contracts, save those not fulfilled by the universities, to be extended or renewed, the procedure for doing this is not appreciably different from the working out of the initial contract

THE SAMPLE

Eleven American colleges are working now in India, from the start some twenty five have been involved The number cannot be stated more exactly because three or four cases are marginal The time available for this study—six months in India —permitted the examination of eight of them The eight were chosen to represent the variety of different types of programs

Because current TCM contracts account for four-fifths of the manpower of organized college programs in India, four of the cases in our sample are of government contract programs. Two of them are among the relatively large contracts with land grant colleges in the field of agriculture and veterinary medicine, one involves secondary education teacher training, the fourth home economics. Two more of the cases are of organized research ventures of American universities in India—one of them brought to a close a few years ago amid some criticism, the other now going forward. The two remaining cases do not involve professors but American students or recent graduates. Both are operated by associations somewhat autonomous of the colleges on whose campuses they are headquartered.

A ninth case, included in the original sample, could not be fully studied in India because, among other reasons, all but one of its American personnel had returned home. This project, that of the University of Illinois at the Indian Institute of Technology, can be encompassed in drawing conclusions upon certain points, such as the training of Indians in the United States, upon which reliable information could be gathered.

The sample is, on the whole, an adequate one. Aside from the varied forms of programs included, the American colleges covered range from a small liberal arts college to the large state universities. The Indian institutions with which they were associated are still more varied—they are in all major regions of India, private and public, large and small, traditional and modern. The fields of subject matter cover social science, liberal arts, together with agriculture, home economics and education.

There is not, in our sample, any program in the field of Indology, or of language, philosophy, history, art or comparative literature. The reason is simple—several such programs exist as teaching or research programs on American campuses, but they have not as organized enterprises sent their staff members to India.

Whether our sample is representative of the quality of the work is a question that cannot be answered with certainty. In planning the study, however, it quickly became apparent that

among several college projects of comparable sponsorship or subject area, some were regarded as relatively successful, others as relatively unsuccessful. We included one such balanced pair, we excluded the extremes of success and failure in two more instances. In no case did we select the reputedly good to the exclusion of the reputedly bad, or the reverse. The more detailed impressions collected in the field investigation confirmed this initial choice, there have certainly been more effective college activities in India than some we sampled, there have been worse, too.

CHAPTER 2

The Cultural Context

'When some of my friends on the staff at the University of Illinois asked, 'What business does our College of Agriculture have in India?' " wrote Associate Dean Harold W Hannah, "I would have liked to have said 'The only proper business of a University, the business of mankind' But I knew this would not be definitive enough for most people, particularly the skeptics Furthermore it doesn't indicate what business of mankind might be immediately involved "

The logical beginning of any effort to study and improve American college work in India is a search for objectives Definition can be sought on two levels Defining the particular areas of research, or skills, operations, ideas and even institutions which are to be pursued or conveyed in a particular college program is the perennial concern of the particular contracts and projects to which the following chapters will be devoted But nations do not devote tax funds to improvements in other countries, nor receive foreigners as advisers, unless upon some higher and longer range purposes And the particular emphasis which is given to a college program aboard, even the manners and attitudes of those engaged in the work from either side, reflect the long as well as the short range objectives, the personal as well as the professional motives, of the men and women involved National purposes grow out of historic national experiences as the culture interprets them Whatever importance one may ascribe to national character or social character, Americans and

Indians would no doubt confess to such different ways of bringing up the young, earning a living, feeling about relatives, being honored or dishonored, and saving one's soul that we can assume basic purposes, national or individual, are defined for the most part differently in the two cultures Our problem of specifying the business of mankind involved in American college work in India becomes the more manageable one of looking for the segments of overlap, of common interest, in two highly divergent cultures

Searching for the areas of cultural commonness, we can look among two quite different bodies of evidence One body of evidence is what the spokesmen for each country say to the peoples of the other country Only rarely, as a matter of fact, do they say anything different to their own people We can find these statements in the newspapers, on television, in testimony given to Congress or Parliament about giving or receiving foreign aid Much the same points can be heard in the speeches of Americans or Indians when they are on tour abroad What we glean from these sources we might call the *conventional* view of what the two countries have in common The conventional view is taken by the governmental leaders of the two countries, and in simple form it is a stereotype in the minds of millions of people Neither fact, however, makes it the less valid We would expound the conventional view in detail below except that, since it is this view through which most American college programs in India are explained and supported, there is little new to say about it Instead, we follow each of its familiar tenets with a brief critique to suggest limitations and questions which lead on to the next approach

The other body of information we might consult is the descriptions and explanations of each culture made by scholars and social scientists who have studied it This source will yield us at least two kinds of generalizations not to be found in the conventional view statements of how one culture basically differs from the other, and questions about whether each culture is in fact approximating the ideal model it has set for itself Out of the probings of serious scholars we can derive an *analytical*

view, or more properly, a series of them, since it is not yet possible to demonstrate scientifically that one analytical statement is correct and another false. We can and shall use analytical views, nevertheless, to discover gaps and contradictions in the conventional view. Except for an initial comparison, it is of Indian, not American, culture that analytical views are expressed below. The reason is merely that this is a study of college programs in and for India, which have by virtue of that fact been posited on some notions of India, which deserve analysis. And the possible lines of analysis of Indian culture are not by any means as well known, yet, as the many critiques and explanations of American culture.

THE CONVENTIONAL VIEW

1 *International Relations* That America's and India's national interests coincide to some degree in the realm of world affairs is the foundation of the vast expanse of American college work in and concerning India. The point is made in the inter-governmental agreements initiating the technical assistance programs. From the American standpoint, the danger of another world war can be reduced by helping a populous, influential and promising Asian nation to stand securely on its own feet. Sometimes the American interest is defined negatively as simply opposing the expansionist tendencies of communism, and this definition seems to guide American policy with respect to some other Asian countries. But since American public aid for India has clearly been extended regardless of India's policy toward communist expansionism, the above statement can fairly be considered the official view with regard to India. India, on her part, needs massive economic and technical assistance, but will only take it in such ways as do not mortgage her political self-determination. The overlap of interests is thus long run, and logically inescapable for both countries.

It would be inaccurate, though, to consider the common interest intimate or rooted in sentiment, as is each country's

tie with the United Kingdom We must recognize that outside the specific area of interdependence, each country shows chronic tendencies to demonstrate that it is going its own way

2 Development However divergent their past and present, India and America are thought by their people to share a future largely alike This future includes science, continuously more elaborate and serviceable technology, and rising living standards On the social and political sides it includes popular education, equalization of opportunity and constitutional democracy It is accepted that India is irresistably developing, and that America is even further developed toward this dream

But though Indians often speak of development as "Westernization" or "modernization" as though there were but one path, probably most of them, speaking candidly, would reject "the West" or America as models in at least three respects They visualize their future as free of race discrimination They intend to minimize profit as an economic motive They wish to get away from the market as the guide to production There would be a little controversy on the last two points But in India socialism which is as unquestioningly accepted as democracy among the ends of development, is recently taking on these specific meanings

Now while American tax money is invested in India on the assumption that the drive toward development is irresistible, and while much of the American capacity for technical assistance is understood to be due to America being more developed, the fact is that the conventional view of development does not really see the connection between where India is now and where both countries will be in the future How America developed, and whether India, from its very different start could develop through the same steps, have been until some three years ago blank areas in the conventional view Very recently it has been accepted by the public leaders in both countries that industrialization in India will require an input of capital so great that its extraction from the incomes of living Indians could only be done dictatorially Otherwise, a very large part of that capital must be supplied by non-commercial grants or credits from out-

side India This must continue until India produces enough each year to continue industrializing out of her own surplus, though it is not known when that "take off point" can be reached *

This new perception has come partly from the thinking of Indian planners and partly from recent research and thinking in American universities on economic development. It has the promise of providing a rationale for a steady and clear policy of American economic aid for India. But first we will have to know how much outside assistance, over how long a period, will be required to reach the "take off point." And the broader aspects of foreign policy between the two countries will scarcely be stabilized until we learn much more about the processes of development connecting India's present with the future. For instance, because neither the United States nor any other country has yet developed democratically from a retarded position in an overcrowded country, it simply is not known what aspects of development must be centrally planned until the "take off point" is reached. Nor is it known what areas of choice must be left to individuals in order to maintain democracy. Until more knowledge is available, and it must be had through very carefully designed research since history provides no reliable analogue, the people of the two countries cannot know to what extent the policy differences between them on such issues are determined by differences in basic value systems, and how much these are merely responses to different factual situations that might undergo change. Here, obviously, is a blind spot in the conventional view.

3 *Ideals* Certainly there is an area of agreement as to ideals. This is true despite the contrast in both theology and religious organization and ritual. More than a century before America had any concern with India in terms of foreign policy, American missionaries began working in India. There were periods when their ideals found enough favor with certain segments of the Indian population to constitute strong competition against Hinduism particularly their acceptance of untouchables.

* Max Millikan and W. W. Rostow, *A Proposal Key to an Effective Foreign Policy* (New York: Harper and Brothers, 1957).

into the churches and their notion of the equality of women On the other hand, proselytizing Christianity is not easy for Hindus to understand and consider purely on the level of values, since their own religion (except for some later sects) is acquired only by birth within the culture and not by conversion The tolerance of which Hindus are proud may thus balk at the conversion of Hindus to Christianity But Christian workers in India have regularly conducted schools, hospitals, and social work And increasingly Americans entering India, like the Americans whom Indians meet in American colleges, have been exhibiting a variant of the Judaeo Christian tradition which is ethical, philosophical and personal rather than evangelical Its bearing is most evident on work and home life This is viewed sympathetically by modern-minded Indians of various faiths and degrees of secularization

During the 19th century, movements like Brahmo Samaj in Bengal proposed a reinterpretation of Hinduism by the acceptance of some of the ideals of Christendom Nationalism was, of course, in part an ideal that India drew from the western tradition But the profound and yet tangible demonstration of the common ground between Indian and Western ideals was provided by Gandhi It was the key to the strategic success of his method of revolution that, though the power of non violence was familiar in Indian culture, in the end it seemed morally more legitimate to Britain and other western countries than did the methods necessary to suppress it While much attention has been paid to the Gandhian legacy of non violence as a possible common value between India and Western people, probably a more subtle but pervasive aspect of the legacy is the assumption in India, as in Western Europe and its offshoots, that ideals can become common to all mankind

4 Knowledge Dedicated to making up lost time in scientific progress, India is now seeking scientific training for her young men and women, and the exchange of scientific knowledge wherever she can find it, be it in the United States, the United Kingdom, Russia or Germany In the natural sciences, many people in India have felt that world leadership has shifted from

the United Kingdom to the United States and now is or may be shifting to Russia. But the English language gives Indian scientists an unparalleled access to their colleagues in England and America. So powerfully did India's scientific awakening at the end of the 19th century depend on the entry of a few of her brilliant men into the abstract and completely international fields of mathematics, physics and chemistry, that the development of biological and earth sciences, which required study of Indian phenomena, lagged seriously behind.* India is now realizing it is necessary to apply methods developed in international science to the study of Indian situations in these fields.

In the humanities, while command of English has led Indian scholars to explore the traditions of Europe and to a lesser extent America, it is only in the last few years that any Americans have been proficient in any of the languages of Indian culture, save Sanskrit. Such proficiency is still much too limited and scattered to be very useful for systematic study or appraisal of Indian culture. Americans are beginning to draw on the abundant scholarship of India regarding Indian cultural traditions. But this commonly requires access to such knowledge through some of the modern scholarly concepts and methods, for instance in descriptive linguistics or in historiography, which are not yet widely commanded in India.

In the social sciences, international interdependence probably already exceeds the availability of truly international bodies of theory. Indian social scientists have designed much of their research upon concepts developed in the United Kingdom or the United States, concepts not necessarily comprehending some of the dominant variables in Indian economic or social or political or personal life. American social scientists have had to make a choice between studying a problem comprehended in internationally comparative theory, e.g., capital output ratios in various industries, at the price of abstracting it from possibly decisive elements in the Indian social context, or on the other hand, studying the Indian village or some other whole unit

* Government of India, University Education Commission, Report 1947-49 (Delhi 1950), Vol I, pp 164, 170

at the price of suspending international comparison that might bring the problem into the context of the major body of American knowledge

Until a few years ago, Indian interest was in basic and abstract natural science in which American development had come late, while there was little support in the United States for the kind of scholarship which might organize the phenomena localized in India, for much of the finest American work in biological and earth sciences was applied to American agricultural and economic problems, while India was considered a British field of scholarship in the humanities and social studies. Now India is vitally concerned with applied science, and feels the need for social science to guide her planning, and thus increasingly finds American universities a place to turn. The United States, on its part, operating massively in the last ten years through the Fulbright and Ford Foundation programs, and now through federal support for language studies, has suddenly recognized the value of knowledge of Indian culture and society. For the first time, the limiting factors are in the disciplines themselves.

THE ANALYTICAL VIEW

1 *An Amalgamated Society Confronts an Unevenly Developed One* Professor Daniel Boorstin, attempting to characterize American culture, has stressed its "given ness"—the unique degree to which it is all of a piece * Americans never had a deep ideological conflict, for as immigrants they were self-selected for their belief in equality and opportunity. In a bountiful habitat, these ideas worked. Americans thought they could and to an unprecedented degree did become equal. The assumption of Americans, rich or poor, that they are middle class, the alleged tendency toward 'other-directed ness' are manifestations of an amalgamated culture.

The British, in the romantic years of the early 19th century,

* Daniel Boorstin *The Genius of American Politics* (Chicago: The University of Chicago Press 1953), pp 8 35

were confident that India could be remade on the model of England and that this was their sacred and imperial mission *

What we are apt to forget is that, even in that optimistic and moralizing era they did not hope to remake the millions, only the aristocrats of wealth, position and intelligence This "downward filtration" theory of the British impact on Indian national character was stated with his usual force by Macaulay

I feel that it would be impossible for us, with our limited means, to attempt to educate the whole body of the people We must at present do our best to form a class who may be interpreters between us and the millions whom we govern—a class of persons Indian in blood and color, but English in tastes, in opinions, in morals and in intellect.†

The policy of educating an elite continued, but the Mutiny of 1857 ended the British hope that English character would filter down. Thenceforth the British ruled as a handful of self assured but isolated administrators in a vast population which did not understand, let alone share, their institutions and virtues Into this select band of administrators the British, reluctantly perhaps, admitted a handful of Indians They, too, were selected by an English examination upon European culture They, too, became as a sensitive English officer of the Indian Civil Service put it, "strangers in India"‡ They could not hope to change the mass, particularly the rural mass they governed in the districts But they could provide orderly and sometimes ameliorative government. This made them indispensable

Thus it happened that the departure of the British made surprisingly little difference Independent India, too, has its elite of the English language educated They have no longer quite a monopoly of power They do hold all positions to which a

foreign adviser or educator can be attached. And they tend, as a whole, to feel very keenly that a gulf separates them from "the people"**

How is an American, particularly one who comes overseas to help an "underdeveloped country," to comprehend this situation? The Indian professor or administrator whom he is to advise may be more intelligent and cosmopolitan than he, and is likely to be more articulate in English.

But the American will quickly discover something like what one agricultural specialist wrote down after his first month in India:

There seems to be a wide gap between university administrators and their staffs. This same gulf exists between faculty and students. Agricultural teachers and those in agricultural research do not seem to cooperate as much as they could. There is still a wide gap between those who know and those who do.

An analogous disjunction may be encountered at the level of whole institutions. According to the present Minister of Scientific Research and Culture, 'There has been unceasing and at times sweeping criticism of the prevailing system of education for the last thirty years'†. The very preoccupation of the institution's best minds with 'modern thought,' which means the intellectual currents of England, and with 'the window on the world' which means the English language, immunizes them to public criticism.

Now the American, from his own cultural background, may be sure that progress lies in breaking down the barriers between elite and public, institution and clients. He will be nonplussed to encounter the sincere feeling on the part of the Indian institution head that such a move would be

* Edward Shils, *The Culture of the Indian Intellectual* (Chicago, The University of Chicago Committee on South Asian Studies, 1959) Reprinted from the *Sewanee Review* April and June 1959, pp 17-30

† Humayun Kabir *Education in New India* (London George Allen and Unwin 1956) p 152

reactionary It would invite control of development by those who are themselves undeveloped

Needless to say, both are partly right. Quite naturally, given the downward filtration concept and the history of colonial administration, those who had custody of the civil service, or the schools, or the research institutes sought to insulate them from the people they served or governed. Quite naturally, too, institutions which were kept aloof from the participation of most of the people risked coming to be run only for their own sake. It is hard to see how it could have been otherwise, knowing that institutions and individuals were developed out of context.

2 An Assumed Creed Confronts a Remaking of National Character We have looked at only half of the historic context. Just as India is distinctive in the degree to which institutions and elite cadres were drawn ahead of popular development, so India is distinctive in strength and moral clarity of the movement to lift up her whole people in self respect, unity and breadth of sympathy. On whatever front Gandhi operated as leader of the revolution in character, he turned his back on the esoteric institutions in order to develop the masses of the people. That is the significance of the *charkha*, civil disobedience, basic education, the sweeping out of latrines by the highcaste, of homeopathic medicine and self-denials of various kinds. He changed the independence movement itself in a few years from a movement of Westernized urban intellectuals to a movement of the people, including the villagers. But his profound contribution was to discover in the Indian tradition (in the *Bhagavad Gita* he used to love to say) in common with the other high religious traditions of mankind, a set of values which appealed as much to the conscience of the British as to the conscience of Hindus, Muslims and Sikhs.

A people's values cannot be reinterpreted in a generation, because at best ideals have to be lived in order to be learned, and the very acts of moral purity by which the values demonstrate their worth in one historic setting (such as fasting for a principle, or spinning, or peacefully disobeying an immoral law) embody different values under the changed circumstances of

another time Not only that, but there was a code of values inherent in the Western-inspired institutions, too, and though Gandhi could teach tolerance and even appreciation of some of them, it was too much to reconcile them with the morality of the revolution So India pursues hand-spinning and hand weaving along with industrialization, rejects the slaughter of starving cattle while pursuing scientific animal husbandry, feels the moral authority of hunger strikes as well as majority rule The incompletely reconciled systems of values of course imply different emphases in education, and this exhibits itself in what a perceptive American educational administrator calls the "polarities" in Indian educational objectives from the basic schools in the primary grades to the differing concepts of rural universities *

From one point of view, of course, the competition of systems of ideals is a very healthy thing In a revolutionary situation, it is the alternative to a movement which claims a monopoly of God's will, or of the truth of the future, and which is thus headed for a closed society But a situation in which the leaders of a nation feel that its values must be changed, but without agreeing (or winning the people's agreement to) what the new values should be, is a very unfamiliar, in some ways a disarming context for American professional advisers to work in For American culture has—more, said Gunnar Myrdal, than any contemporary Western culture—a clear, explicit, and generally accepted creed of fundamental values † To this day, much of it is expressed in the Declaration of Independence American academic life poses as sharp value choices as any But the American has been habituated to face these decisions on two premises Firstly, it should be possible to get agreement on the principles by which these issues are decided Secondly, if there

* F Champion Ward Some Polarities in Indian Educational Thought in Milton Singer (ed.), *Introducing India in Liberal Education* (Chicago The University of Chicago Press 1957) pp 90-99

† Gunnar Myrdal *An American Dilemma* (New York Harper and Brothers 1944), Chapter 1

is a contest of principles, then the pragmatic process of trying something and watching the results should resolve it If our analysis of the Indian context tends toward accuracy, then neither premise can be practically valid in India

The confrontation of an unsettled state of the system of fundamental ideals in India with the clear, fixed, assumed creed of America has certain implications for the conventional viewpoint about the common ground between the two countries In the first place, agreement between the people of India and America as to ideals must retain an element of contingency even where avowed purposes coincide Americans may expect to find that goals announced for a long term project, or officially set up as the guide to building up an institution, are in fact deeply questioned where they run counter to another still vigorous current of belief Indians may expect to find that Americans proceed directly toward announced goals, little realizing that these are not yet available to the generation whose support may be required

The authorized view of the process of development must be modified, too A national leadership which undertakes the reorientation of the value system of the population takes on a responsibility in which is implicit, no matter what the leaders' conscious preference may be among political-economic systems, and aside, even, from the exigencies of the economics of industrialization, a guidance or control of the people for which the American situation had no need at all The guidance is not the less necessary because it is carried on by elected leaders But it makes the role of those leaders differ from the role of their parliamentary counterparts in countries whose values are agreed, though they stand for election they may function—it is quite possible that they need to function—as "charismatic" leaders And it makes the role of schools and colleges equally different For while they are looked to as the means of inculcating within the new generation the ideals which it is planned that the people have, even though there is disagreement what those ideals are, they are also looked to by those who hold some status or security or hierarchical position in them as refuges

not from an ideological crusade, but from a crusade the ideology of which is itself in discussion Thus in the new institutions the old values may contest with several versions of the new

3 Unity of Function Confronts Unity of Emulation So far we have considered some of the disjunctions in the Indian culture of the present, as they may confound the American expecting homogeneity and consensus But are not these disjunctions mere passing phases of acculturation under the British impact, and of the awakening forces of nationalism? To answer this question the analyst must move to the very frontier of present theorizing about Indian culture All that one can say now is that certain very penetrating, yet highly controversial explanations would suggest that the answer is "No "

Certainly the coexistence of diverse value systems is nothing new in India India's civilization was always, in a certain sense, conglomerate The subcontinent always had, as far back as history and archaeology can show, more than one religion, culture, language and state Yet the idea of unity persisted, at least from the time of Asoka, and the cultures of the subcontinent showed as they invaded and survived some common features The commonness of the epics and of the places of pilgrimage and of other contents of the cultures has often been noted But it is clear, too, that Indian civilization survived in part by its ways of linking unlike cultures into some kind of loose fabric Very little is known about these ways

The newer theories do cast serious doubt on one familiar explanation of the bonds of unity in Indian civilization They were not the bonds of the village, writ large For we are learning that save in the exchange of labor (the *jaymani* system) the village was neither the unit of interdependence nor of reconciliation of competing loyalties Certainly marriage ties reached outside the village, the most meaningful gods were often neither those of the formal Sanskrit pantheon nor often of the village alone but of a group of villages or a nearby town, much justice was that of the caste tribunal having jurisdiction over still another area of villages, communication was in a dialect varying

gradually as one passed through rural districts and bearing little relations to the written language of the schools and cities *

What, then, are the bonds powerful enough to absorb most invading cultures, and to spread Sanskritic culture right down the subcontinent? Clearly they are related to caste, which has in time been able to make a stronger mark on the cultures with close knit value systems which penetrated India (Islam and Christianity) than any other feature of Hindu culture. But the common concept of caste as a hierarchy entered by birth and observed in terms of social distance is neither wholly accurate nor wholly adequate to the present situation. It not only excluded the lower orders from the high general culture as it attracted them to pattern themselves on it, but also gradually (over generations) recognized their claims to move up the caste ladder if they succeeded and also discovered new tests of acceptability † Both distance and emulation were key cultural processes. The Brahmins, who were the only local members of any functioning all India caste, both conveyed the all-India standard through their command (for centuries a monopoly) of the most sacred texts, and also sanctioned the myths by which the history of any lesser caste could be reconciled with its new claim for higher status. Much of the coherence of India's civilization was no doubt the momentum of tradition in a diverse but isolated homeland. But India had a way of dealing with the new, also, whether from within or without. Whether the British remade the institutions of India without great force or colonization by large numbers because they were accepted as a new pattern to emulate, so that their very unlikeness made their model attractive, we do not know. We do know that among the Brahmins were found the first Hindus to emulate their ways

* McKim Marriott, (ed.), "Little Communities in an Indigenous Civilization," *Village India* (Chicago University of Chicago Press, 1955), pp 171-218. On Language see John Gumperz, "Some Remarks on Regional and Social Language Differences in India," *Introduction to the Civilization of India Changing Dimensions of Indian Society and Culture* (Chicago University of Chicago Press, September 1957), pp 31-38.

† M N Srinivas "A Note on Sanskritization and Westernization," *Far Eastern Quarterly* (August 1956), pp 365-80

This theory pulls together several research findings which may eventually be interpreted through a different conspectus. And yet they are enough to suggest that the Indian cultural context lays a trap for the foreign adviser. For the outside expert it has waiting still the honored role that once was filled by the Brahmin to interpret the conformance of the local practice to the higher general culture. It is a role that need not establish the functional value of that general culture, in the context of the Indian traditions, in a sense its value is its inaccessibility. But that process of emulation, taken for granted still by enough individuals to mislead the visitor, is of course directly counter (a) to the equalitarian values introduced from Europe, (b) to the test of functional success maintained so rigorously in the freedom movement by Gandhi, and in many contemporary program fields by hard headed government officials, (c) to the fundamental idea common to all of these new influences that the country will be built up according to a scale of abstract values—they are stated in the preamble of the Constitution of India—so that each citizen is invited to test any particular means of development by those declared ends, rather than by the model of a foreign practice, whatever be its prestige.

But these comparisons can be looked at from an almost opposite angle. If the Indian heritage is one of individuals and institutions developed far beyond the common matrix of the civilization, one of contesting (not agreed) values, one of civilizational unity through the emulation of inaccessible norms, then American culture is almost tailor-made to complement it. But can two nations build a relation on their differences? Or is this merely another way of stating the problem of *The Passage to India*?

We began looking for common cultural factors, we have ended discovering complementary ones. The analytical view does not cancel out the conventional one—even in theory two cultures can be conceived as complementary only on the assumption that there is some entity or process toward the fulfillment of which one completes the other—yet it does make a difference in the way one looks at the interrelation of the countries. Both with regard to our view of Indian development, and our view

of America's possible contributions to her, the difference has a practical bearing.

India is not only making a series of five year plans, which reach the social and educational as well as the economic sectors of her contemporary life, but she assumes that a clear picture of her long range future should guide the making of these plans. This picture is called by political leaders of most shades of opinion "The Welfare State" and "The Democratic, Socialist Pattern of Society." Thus some sophisticated Indian observers have as firm a conviction as some naive American observers do that India's development is like the progress of a train along a single track, only the Indians do not see the track as the same one traveled by America earlier.

But if our analysis, or a related one, be valid, India is not a monolith, nor a single force moving forward in the line of the momentum of the Independence Movement or the magnetism of a single set of ideals. India, as Prime Minister Nehru has often said, is in ferment. Anyone who expects the imperatives of development economics or "decisive leadership" to deliver a predictable future is headed for quite unnecessary disillusionment. On the other hand, if one reflects soberly upon the magnitudes of the unknowns India is combining in the fermentation, one can reach a sympathetic understanding of some of the surprises that the process has already thrown up.

Leading India into a future of social solidarity, cosmopolitanism, and perpetual technological revolution is as much of an enigma as was leading a peaceable, isolated America into either World War. The great difference is that for India there is no early relaxation in sight. India is trying to jar her best-established institutions out of their ruts, while depending on their daily performance, to stir and mobilize her rural masses, while depending on their votes and harvests, to discover new social bonds to replace caste and at the same time to define new ideals of the good life. Plans are all the more necessary, and India is going about her planning in a prudent way, but it would be pedantic indeed to expect the plans to contain the ferment.

Our analytical view has an implication, too, for America's approach. It is certainly not that America can, by any process of advice or example, guide the ferment. Somewhat to the contrary, it is that what we can gain from India and contribute, is itself impossible to project far into the future with certainty. A wide variety of approaches, pursued with some experimental skepticism, is much more promising than an attempt to find out the one best way. Practically speaking, this is a relationship which an open, plural society, whose institutions have a great deal of autonomous initiative, is remarkably suited to undertake. American colleges, particularly, should find such enterprises challenging and appropriate.

From a very long-sighted view, they should have the same appeal to America considered as a tradition, or a segment of a civilization. Perhaps the reason we are drawn to India, the reason we can in certain small ways help her, and learn from her adventure, is that she is undergoing a revolution, but an open ended one. That may not be the only common basis of the complementarity of our experiences, but it should certainly be enough.

Land Grant Colleges: Individuals and Their Work

In 1958, it became dramatically evident that India's number one problem was still food production.* By that time, five American agricultural colleges or universities had been at work for three years on a project whose ultimate purpose was to extend science to the Indian cultivator. This is much the largest activity of American universities in India—in five regional divisions it extends throughout the country. And by reorienting the higher education of India's largest and most basic occupation, farming, it has the possibility of contributing to profound changes in India's long range future. On both accounts, this is the biggest job that American colleges have been called upon to do in India.

THE NEED

Agricultural Education at the Time of Partition

When the Dominion was formed in 1947, India had twenty-one institutions offering higher education in agriculture. Fourteen

* Prime Minister Nehru said in a Parliamentary debate on the food problem "gradually under the stress of circumstances and failure of the monsoons of the result of production, and difficulties, in making a move in various matters speaking for myself, I learnt a bitter lesson slowly and painfully. I realize now that there is nothing more important than agricultural production, more especially food production. So far as the government is concerned it realizes that and works for it"—In Parliament, August 21, 1958, as reported in *Times of India* Bombay, August 22, 1958.

entirely separate institutions taught veterinary medicine. The annual intake of students was between one thousand four hundred and one thousand five hundred, assuming half graduated, this provided three agricultural graduates per million of India's farming population * Post-graduate instruction was more limited still Nine institutions offered instruction beyond the bachelor's degree in agriculture or veterinary medicine, their combined capacity in 1948 was 166 students Most offered work in one or two departments only †

Though underdeveloped in quantity and scope, agricultural education, like other higher education, had acquired certain fairly consistent and extremely durable patterns In this sense it might be said to be highly developed, but along lines not serviceable to India's farmers or to the economic growth of the nation This extraneous development was incisively and authoritatively analyzed in 1949 by the University Education Commission Agricultural education, the Commission found, was pulled in two different directions away from its chief purpose On the one hand, by 1949, the agricultural colleges and soon thereafter the veterinary colleges, too, were each affiliated to one of the degree-granting universities The affiliation brought the agricultural colleges under regulation of the parent universities without the compensating advantages that might have been expected breadth of faculty, library or laboratory resources in the basic sciences, or the stimulus of scholarship This was because, except in Banaras Hindu and Osmania (at Hyderabad) Universities, the agricultural colleges were not located on university campuses nor organized as parts of resident, teaching universities The parent university approved the syllabus of each course, its agents, and not the teachers of the courses, wrote the questions for the examinations, and marked the papers

In all other cases except for a few private agricultural colleges such as Anand Agricultural Institute, Allahabad Agricultural Institute, and Balwant Rajput College, higher education in agriculture was an administrative part of the state department

* Report 1947-49, *op cit*, pp 178 81

† Report 1947-49, *op cit*, p 182

of agriculture, and veterinary education part of the department of animal husbandry This meant that a college teacher might at any time be posted to serve as agricultural officer in a district, or vice versa, by the state director of agriculture Appointments, promotions and budgets of the colleges were controlled by the administrative departments Indeed, the function of the colleges was almost exclusively to train government agricultural or veterinary officers, and this led to a single prescribed course of study for all students The hierarchical organization did not promote the academic atmosphere appropriate to higher education

The pattern was defective in its goals as well as its structure Because each state agriculture department did its research in small stations, often dealing with a particular crop like rice or sugar cane, and because these stations were remote from the agriculture colleges and not staffed by their faculties, teaching was not enlivened by research discoveries, nor was research guided by the best scientific minds of the state Most serious, there was neither machinery for nor interest in, getting the results of agricultural training or research into use on the nation's farms 'We have neglected the countryside' said the University Education Commission 'If we wish to increase our food production, we must train the farmers and utilize the results of scientific research in agriculture in the fields'*

It is interesting to observe that in the next seven or eight years, higher education in agriculture and veterinary medicine changed little, except quantitatively But the effort to increase food production and to regenerate the villages took concrete shape The result was a widening of the gap between India's agricultural needs and the pattern of education

ACTION OUTSTRIPS EDUCATION

The partitioning off of grain growing areas in Pakistan and other disturbances caused post war food shortages so severe that

* Report 1947-49, op cit., p 45

India had to reimpose nation-wide rationing In 1949 the central government decided on a concerted effort to make up the country's shortage of foodgrains, 48 million tons, by 1952 The methods of this Grow More Food Campaign were to provide services—wells, plowing of jungle lands, and supplies, improved seeds and fertilizers These methods were to the point, and the setting of a target for raising agricultural production was an epoch making step, but the Grow More Food Campaign did not achieve its objectives According to one estimate only two to four percent of the grain growing acres of the country were put to improved cultivation * A bad monsoon in 1951 necessitated the import of 47 million tons of grain, almost as much as the planned increase The government set up a committee of enquiry in 1952 to find out why the campaign had fallen short, and recommend a new departure

The upshot of this study, and of a much larger but hitherto scattered series of experiments with village self help, were the Community Projects launched in 1952 They were based on the premise that a change in productivity depended on a change in psychology, and that the whole village was the unit for the germination of the new spirit Any obstacle blocking the way must be removed, whether it be illiteracy, bad roads, malaria, smallpox, bad water supplies, lack of credit, or lack of manure Self help was the method, but that self help was to be stimulated and assisted by a village level worker for each ten villages The scheme reached more than one third of India's villages in the first Five Year Plan (between 1952 and 1956) and by 1958 had reached half of them

Partly because it was a "crash" program, partly because of the emphasis on awakening and organizing the latent energies of the village population, the village level workers, more than 20,000 of them by 1958, were trained outside the colleges of agriculture Their course has steadily been lengthened from six to eighteen months An authoritative appraisal in 1957 said of the village level extension worker, 'We are not satisfied that

* V T Krishnamachari, *Community Development in India* (Delhi Government of India, Publications Division, 1958), p 27

with the type of training he has been receiving, he has been able to make any special mark in this all important field (agriculture) and for this reason, we emphasize the need for giving him a much better training in agriculture." The recommendation was not for a full college course, but for a course designed in consultation with the colleges, and worthy of recognition by them toward later degree work.* Not only was personnel deficient on the agricultural side, but program was, too. There was too little basic knowledge of soil management. The seeds and the fertilizer and the water were not assembled at the right time, the economic incentive to produce was not always there. The enquiry committee found that, taking the program as a whole, it had only increased production by ten percent in its area of operation. By 1958, India was ready for a still more thorough attack on the problem of agricultural production.

The Community Projects movement, which Prime Minister Nehru called "revolutionary" and a United Nations mission considered to be "the most significant movement in Asia at the present time,"† was strongly assisted by the United States Technical Cooperation Mission and the Ford Foundation from the very start in 1952. This made it natural for the Indian government to seek further American help in the later effort to bring a higher level of science to the service of the cultivator.

GENESIS OF THE CONTRACTS

Meanwhile, in the field of agricultural higher education, the government was beginning to set targets, and the colleges were beginning to associate themselves for a common task. The First Plan provided central grants to create four new colleges of agriculture and four of veterinary medicine. Enrollment was

* Government of India, Committee on Plan Projects (Balwantrai Mehta Committee), *Report of the Team for the Study of Community Projects and National Extension Service* (New Delhi: Manager of Publications 1957), p. 62.

† Krishnamachari op. cit. p. 80

stepped up to meet the estimated staff requirements Agriculture Minister K M Munshi convened the Indian Council of Agricultural Education in 1952, it was a body associating college heads with state and central agricultural administrators

The American government had begun technical assistance to India in 1952 Of the first seven intergovernmental agreements signed, all but one were agricultural Since the improvement of soil fertility offered the quickest prospect for growing more food, the United States Technical Corporation Mission provided aid in building the 1,000 ton per day ammonium sulphate plant at Sindri, and meantime supplied 215,000 tons of United States fertilizers In 1953, it became evident that a great deal more knowledge was needed on how to use these unprecedented amounts and new varieties of fertilizers In July, TCM acquired a soil fertility expert, Dr Frank W Parker, who after ten years in the United States Bureau of Plant Industry, Soils and Agricultural Engineering, was a professional adviser to the private fertilizer industry Dr Parker proved to have, in addition to these qualifications, an outstanding capability in the planning of educational policy For more than five years, he served as Chief Agriculturist in TCM

In July 1953 Dr Parker first discussed informally with one of the leaders of the Indian Council of Agricultural Research the general idea of associating a few of the American land grant colleges with the development of agricultural education in the regions of India The attractiveness of the regional idea at that stage was quite practical it was a way of recruiting enough American agricultural educators for India to meet the whole country's needs at once, without having to put a poultry expert or a soils scientist in each of the then twenty-eight states One college could serve three or four states

The demonstration of a land grant college sending professors to, and training faculty from, an Indian institution was already available Since 1952, the University of Illinois had had such a relationship with Allahabad Agricultural Institute Though supported by TCM funds, this venture had been stimulated by Dr Arthur Mosher, who, in one phase of an outstanding inter-

national career in agricultural education, had headed that Institute. Partly to cover the country's needs, partly because assistance by the United States government to a Christian missionary college could not reach the overall problem of India, it was desirable to broaden the impact.

In April 1954, the director of TMC, Mr Clifford H Willson, and the secretary of the Indian Ministry of Agriculture, Mr H M Patel, reached Agreement Number 28 under the general intergovernmental assistance program. It called for (a) \$500,000 worth of books and laboratory equipment for the agricultural colleges and research institutes, and (b) a comparative study of agricultural education in India and in the United States by a high level joint team. In establishing this Indo-American Team in November 1954, Mr H. M. Patel stated (for the Government of India) "The experience of the Agricultural Colleges and Research Institutions in the USA, particularly the Land Grant Colleges, who have a long history of agricultural development work, it is felt, would provide some useful guidelines for strengthening agricultural colleges in India and for promoting Centre-State cooperation and coordination in the field of agricultural research"*. The Team's work was mainly to recommend a pattern for integrating agricultural education, teaching and research in India, as we shall see in the following chapter. But it provided the clearest possible guide to the forthcoming contract programs, and helped get personal understanding of their purpose in both countries.

Dr Parker and Mr J V A Nehemiah, the secretary of the Indian Council of Agricultural Research, drew up the terms of reference for the college contracts before the Indian members of the Team left for their three month tour in the United States. They divided India into five regions, putting four sizeable states in each. The state in which Allahabad was located, Uttar Pradesh, together with the less developed adjoining states to the south, would make a natural field for Illinois to serve Con-

* Resolution reproduced as Appendix I of the *Report of the Joint Indo-American Team on Agricultural Research and Education* (New Delhi: Indian Council of Agricultural Research, 1955), p. 99.

sidering transportation, crops, and existing administrative regions it was not hard to define four other regions, one to the east, one to the northwest and two to the south They estimated the value of assistance required at \$3,600,000, of which \$1,110,000 was for books and equipment, and the remainder for the services (for two years each) of thirty-seven American college staff members in India, and the advanced training of thirty-five Indian staff members in the United States

Dr Parker preceded the Indian Team members to the United States by ten days in January 1955, and visited those land grant colleges which appeared to be promising contractors In three months Ohio State, Kansas State College and Tennessee (besides Illinois) each agreed to take on responsibility for one region of India Representatives of these institutions met in Chicago while Dr Parker and the Team members were still in the United States Pennsylvania State College also agreed tentatively, but later withdrew, the University of Missouri was substituted Later in 1955, two-man teams from each of the five colleges or universities surveyed the situation in their respective regions of India In 1956, the last of the five contracts were signed and the American teams of technicians were at work in India

In three years since the program got underway, the five land grant colleges had, by the middle of 1958, sent forty five technicians to India They had brought eighty Indian faculty members to their American campuses for training The cost of the program had been extended to \$4,890,000, partly because of the inclusion of veterinary medicine Thus twenty-five agricultural and fourteen veterinary colleges in India were being strengthened to become combined centers of research and extension as well as teaching

TECHNICIANS CASE ONE

Dr F W Albertson, grasslands specialist on the Kansas State College team in India, is professor of Botany at Ft Hays State College in the American Great Plains He had devoted his pro-

fessional career to the study and improvement of grasses in that region of semi arid climate His Indian assignment was in Saurashtra, also a region of little rainfall with one-third of its area in grass At the end of the 1956 monsoon, when Dr Albertson arrived, treeless horizons, clear atmosphere and scant population of this western most state in India resembled the landscape of the American Plains As in the American Plains twenty years before, overgrazing had at last been recognized as a problem the government should do something about The head of the Saurashtra department of agriculture had asked for an American grasslands adviser In 1955, the two man reconnaissance team from Kansas State College had agreed to include such a job in implementing their contract to strengthen agricultural teaching, extension and research in their part of India

On September 9, 1956, Dr Albertson reached the Saurashtra capital city, Rajkot. Within two weeks he had decided that the hope of getting a grasslands program carried out on the ground, and having it survive his departure, lay in getting it done by the state government. Saurashtra fortunately had an appropriate agency, the soil conservation service, headed by an enterprising and interested graduate of Utah State College, Mr Pathak. His headquarters was Rajkot. But the office and residence the state government had arranged for Dr Albertson was sixty-six miles away in another city While Dr and Mrs Albertson moved to Rajkot on October 29, it was three months before they could find a house They survived the interim in a one room apartment without such conveniences as screening or refrigeration

Meanwhile, there was a much more serious hitch When India redrew the map of her states on November 1, 1956, Saurashtra was transformed into a division of the larger State of Bombay The department head who had requested Dr Albertson's services was transferred to Delhi, his successor had his office in Poona, 500 airlines miles, or twenty nine hours by train, from Rajkot Fortunately, Mr Pathak remained

Grass, like other aspects of Indian agriculture, had already received scientific attention. There were small soil conservation projects going on, some of the most important being north of

Delhi After finding out what had already been learned from these projects, Dr Albertson talked over with Mr Pathak a program for Saurashtra Saurashtra grass was of two very different classes The tall perennials such as *Sehuma*, *Chrysopogon*, and *Dicanthium* were highly nutritious They grew knee high in the government lands reserved from grazing Elsewhere, 18 million cattle grazing 37 million acres of open village range-land had long since eaten them away to a few almost invisible tillers What remained were the annuals that could survive close cropping year after year, mainly *Aristida funiculata* This short grass had taken over partly because it was less nutritious and palatable, and hence was eaten only after the tall grasses were gone The key to improvement was to withhold the land from grazing until the valuable grasses had been reestablished, then the increased forage would more than compensate for their withdrawal Dr Albertson put it in one of his progress reports

Better methods of grassland management must be used if better yields of better grasses are desired What the grass-lands most need is a program of less intensive use each day combined with periods of complete rest This will allow the process of secondary succession to operate in such a way that the high yielding, palatable, perennial, nutritious grasses can be maintained for a good supply of forage for livestock and for enriching and protecting the soil against erosion

This was a simple idea, and in abstract a familiar one Two years before Dr Albertson came, the Saurashtra agriculture department had fenced in a ten acre plot of overgrazed hillside, it provided Dr Albertson with his only immediate proof that land stripped of the better species would be restored by nature What Dr Albertson added, in working out with Mr Pathak the "Plan of Improvement" for Saurashtra grass lands was (a) rigorous testing and measurement, and (b) the persuasion of all the authorities concerned, from the state government to the village board These contributions came fundamentally from new attitudes, attitudes connected with the scientific method and with a certain optimism about the natural and human potential

But they took a great deal of hard work to realize Dr Albertson got his plan of improvement approved by his Bombay and Kansas State College sponsors. Then he and Mr Pathak set about selecting sites for their demonstrations. In the end they got thirty-eight areas, varying in size from ten to four hundred acres. Most of them were scattered widely over the grassed areas of Saurashtra. But six plots were situated within sight or easy walk of the highways radiating from Rajkot. These would be the means of impressing the values of grasslands improvement upon the top administrators and legislators of Bombay State who visited the headquarters city. The real work of site selection, however, was winning the approval for the reservation of each plot from the district governing authorities, and from the village *panchayat* in the case of the village common land. A stalwart helper at this point turned out to be one of the three staff members whom Mr Pathak assigned to work full time on the project. Perhaps because he still helped his father manage the family farm near Rajkot, this man could, partly by exchanging a few shrewd jokes, win a fair hearing from the peasant elders of a village. They had, after all, been propositioned before to take part in government projects for their welfare, and they were inclined to suspect that (a) the project would not in the end prove practical, or (b) that the government would find some way to try it out even if they withheld their own sorely needed grazing grounds.

The other requisite for success was the inculcation of enough scientific understanding of the ecology of grasses to carry the program forward indefinitely. To this end Dr Albertson instituted a daily class in the science of grasses and range management. The three soil conservation service staff members were the regular participants in it, weekly training sessions were held, also, for the field workers of the service located out at district headquarters. One of the technicians assigned to the project was sent for a year's post graduate work on grasses to the Indian Agricultural Research Institute in Delhi. By the time Dr Albertson went home, his three full time Indian associates had got to the point where they would walk across a hillside which

to the layman looked like "just grass," identifying the desirable species, estimating the rate of their growth, and analyzing the factors responsible for it

Dr Albertson's final report, illustrated with 'before' and "after" photographs, gave the details of the results in twenty initial demonstration plots A field thoroughly restored by rest alone yielded three to six times the previous cutting of grass, measured in dried weight How much more nutritious the better grasses were per pound was being determined by a qualified dairy feeds specialist at Anand Agricultural Institute at Dr Albertson's request Two years of rest, aided by the planting in contour furrows of desirable grasses dug from nearby government reserves, promised to restore overgrazed pasture to the point where limited use could be made of it again The differential effects of fertilization, of different methods of planting, and of different times of returning the restored plots to use were placed under controlled observation

In June 1958, Dr and Mrs Albertson went home The sequel was a commonplace one in India, for it is inherent in the tradition of departmental administration Within three months, Mr Pathak, as well as his superior who directed all agricultural work in Saurashtra, and his subordinate, the capable extension man whom Dr Albertson had prepared as his successor, were sent to other assignments This was a matter of normal administration in the office of the department head 500 miles away in Poona Of all the government officers who had taken part in shaping the grasslands improvement program, and who understood its basis, not a single administrator was left The two grasslands technicians were there Would anyone provide the budget, the administrative leadership, to bring three million acres the benefits that had been demonstrated on a few hundred?

At the end of 1958 this question could not be answered Dr Albertson's mission left some crucial problems unsolved One of the most stubborn is the Maldharis This is a race of nomadic herdsmen to whom belong many of the Saurashtra cattle Their attitude toward the settled villagers is something

like that of Cain toward Abel. By the time official justice can find them guilty of invading reserved village grasslands, or even growing crops, they are far away. In 1958, for instance, they had intimidated the watchman of a plot only eight miles from Rajkot and grazed off the good grasses beginning to spread there. More stubborn still is the question if the carrying capacity of Saurashtra's grasslands is increased, will the cattle population simply increase as much until starvation again sets a limit?

In the face of these long range hazards, the soundness of Dr Albertson's specific approach becomes clear.* What he left behind was not entirely in the hands of his immediate counterparts of particular government officials. At the end of the 1958 monsoon the tall grass was very evident in the demonstration plots. It was evident not only to the government officials on tour. The leaders of one village took the initiative to add one hundred acres to the fifty which had been included in the demonstration plot. The respected sarpanch or council chairman of another village broadcast a grasslands improvement message over All India Radio. This warm supporter of the program may even have found a way to stop the invasions into the improvement plots of the Maldhani cattle because as sarpanch he holds minor judicial powers. When one band of wandering herdsmen let their cattle into the improvement plot of his village, he did not bother the government authorities in Rajkot, but imposed a summary fine. The trouble has not recurred.

Dr Albertson's case represents one of the most accurate fits between man and job achieved by the land grant colleges in India. The American technician had not only the precise professional skill required, he had also a "feel" for the distinctive, semi-arid climate which Saurashtra shares with the American Plains. He was a scientist capable of enlisting the confidence of villager and general administrator alike. He had able and

* A few months after Dr Albertson left, one of his Indian associates contrasted the practicality and durability of this demonstration approach to that of another foreign technician in Saurashtra (not an American) who left behind him an exhaustive report with many written recommendations.

interested Indian colleagues, most of whom did not stay long on the job after him, but that is an eventuality for which technical assistance in most Indian situations must be prepared

Yet the question mark remains Will grasslands improvement reach enough of the land for long enough time so that the people of the state are earning more from their cattle, or at least so that there is enough interest in it to assure political support? As Dr Albertson wrote when he left "The grassland improvement program must either expand or perish" Two years was not enough for one man to secure the program's survival Could the Kansas State College team, with its longer lease of life, carry on? Dr Albertson had suggested that the college replace him with another technician, and that his closest Indian counterpart be trained at the college as a participant But the emphasis of the college contract was on strengthening of agricultural colleges, and the host institution in this case was a government department A new technician is in Bombay State now as an adviser on grasslands improvement, he is located at the agricultural college in Poona While he and the group leader will visit Saurashtra and give the improvement project there such encouragement as they can, that does not resolve the doubt as to the Saurashtra program's future The doubt was created when Mr Pathak and his subordinate who had worked most closely with Dr Albertson were replaced by officers untrained in grasslands conservation No one representing Kansas State College in India was close enough to the Bombay department to know that the changes were contemplated The state director of agriculture saw no need for consulting them The first Kansas State group leader went home at the same time as Dr Albertson, his successor had been in India six weeks when the replacements were made

TECHNICIANS CASE TWO

On November 17, 1958, the entire staff of the Institute of Plant Industry in central India assembled in the Institute library

They were saying goodbye to the American horticulturist who had been working among them for twenty-one months. The chrysanthemum and marigold garland, and the quiet farewell speech of the director may have been requirements of the occasion, though sincerely given. But the staff's attentive expressions revealed that they liked the American and were sorry for him to go. The strange thing about the occasion was that, with one exception, neither the director of the Institute, nor the horticulturist himself, could point to any significant result of his mission.

It came about in this way. When the University of Illinois began its agricultural work in India, the Institute asked for an American technician to help launch a program in horticulture. The Illinois group leader visited the Institute, and endorsed the request.

The groundwork exists for an extended research and graduate training program of real significance to the state and also to the region. Since many facilities are common to research in all crops—including fruits and vegetables—this institute should play a very important research role in the expanded state of Madhya Pradesh. A specialist under the regional scheme, with ability to sense the future development of the Institute, as well as improve research and teaching in his own field, should be of great value to the Institute at this time.

The group leader reached his conclusion in December 1955. When the American horticulturist arrived in February 1957 the director of the Institute told him that there was no horticulture program at the Institute, no horticulturist on its staff, and no plan for adding one any time soon. Obviously the potential seen fourteen months before had not materialized. Even in 1955, the Institute had been in a transition stage, for its role of training agricultural officers for the princely states of central India was gone, and the new state government of the Republic of India had not reached an understanding with the cotton textile industry which had for many years shared its cost. Naturally, its then director sought to broaden its role from research on cotton and other upland field crops to include work

on fruits and vegetables, in 1955 he wanted to establish work in horticulture But here, too, the reorganization of state boundaries on November 1, 1956 intervened It placed the Institute in Madhya Pradesh, but two-thirds of India's cotton production remained in Bombay State, along with the important Nagpur orange crop The Central Cotton Committee withdrew financial support from the Institute, there was a lapse of almost a year before the government of the reorganized state of Madhya Pradesh picked it up Then came a new director personally interested in horticulture, but without money to maintain even his existing program, and being new to the state, without political support to raise appropriations

On the other hand, the need for the Institute to grow into an all-round agricultural teaching, research and extension center for western Madhya Pradesh was greater than ever Just that development was called for by the long range state plan for agricultural education which another Illinois team member helped draw up Whether any foreign adviser, even the most persuasive promoter, could have precipitated that development in 1957 and 1958 is doubtful In any event the American horticulturist took no part in the over-all struggle to bring about some measure of integration among the various institutions and disciplines and objectives of agricultural education in Madhya Pradesh He turned more and more to his professional specialty citrus fruit

In India's citrus, mainly orange, groves, many trees are showing yellow streaks on the leaves and dying early The general condition, called "citrus dieback," may be due to a virus disease, to lack of certain trace elements in the soil (zinc, for instance) or to a combination of these specific factors with various kinds of neglect The American horticulturist sized up the problem as the most costly to Indian fruit growers, it happened to be a problem with which he was thoroughly familiar as former head of the horticulture department at the University of Florida He began a schedule of visiting orchards afflicted with the problem, as well as observing the work being done on citrus dieback at various agricultural research centers of India Both in Delhi

and in Poona large scale research had been focused on the problem, he went to these places and made valuable suggestions. But the problem was too complex to yield to an individual approach, and at the Institute the American horticulturist had neither research staff nor facilities for large scale treatment of orchards. His interest and knowledge kindled the enthusiasm of two young researchers at the Institute, entirely on their own time and resources they performed some simple tests of chemical treatment for citrus dieback. He kept busy with visitations and consultations in many parts of India which took him away from his Institute at least once a month. Yet it is impossible to conclude that the American horticulturist gave a new turn to citrus research in India. By the nature of the problem, that must be organized, carefully controlled and many pronged research. The American horticulturist had no research organization to use.

It cannot be said, in the usual meaning of the term, that this failure to leave significant results was a failure of personal adjustment. Some visiting fellow countrymen gathered that this particular American had brought with him some of the racial feelings normal to his part of the United States, but there is no evidence that he permitted any such sentiments to interfere with his cordial relations with Indian colleagues. He was very critical of the way United States government authorities in Delhi intervened in the business administration of the contract, but he had experienced specific personal reasons to be critical. Before he came to India he had been authorized by the University of Illinois campus coordinator to bring along as family members his two dependent grandsons. In India, the embassy auditors disallowed their travel costs. Only the flat decision by the University of Illinois that it would pay the bill if the United States would not save the situation.

The American horticulturist had retired at his university two years before he came to India, it may be that a younger man would have insisted on getting a role in which he could have made a lasting contribution. The fact is that in 1956 both Illinois and the government of India had tried to recruit a younger horticulturist only to have the candidate take an attractive

American offer instead. Without presuming to evaluate potentiality of the man who went to India for making a major contribution at that time, one can conclude (at least by benefit of hindsight) that it should have been evident after a few months that he could not employ his particular abilities at the institution to which he had been attached. The Illinois group leader in India did not come to grips with this problem, perhaps because the group leader changed in the summer of 1957. Nor did TCM, which might have found use for a citrus expert on an all-India project.

PARTICIPANTS

One of the activities of a land grant college under its ICA contract is to train Indian faculty members in the United States. By September 1958, seven of these men (in the ICA argot they are called "participants" to give them distinction from the general run of foreign graduate students) had been trained and sent back to India from the University of Illinois, six from Kansas State College. Of these thirteen, seven were interviewed in this study.*

The author was prepared to find those who had returned disillusioned. A personal letter from an Illinois Ph.D. in genetics and animal physiology, written a few months after his return to his Indian institution, included these sentences:

Many a time I wish I could go away from this suffocating situation and go back to the environment of the American campus—our University life. What a satisfaction and pleasure it was to learn something every day and do something useful.

That man had not been trained under the contract program. But the first of the participants interviewed was also seriously

* These were men situated along the interviewer's itinerary. But some were in relatively inaccessible places, and two were at institutions where there was no American technician.

disillusioned, he expressed the opinion that most of his contemporaries were too

The whole trouble with the participant program (he said after his reserve had worn off) is that the intentions which are expressed by the head of the host institution in nominating the participant are not expressed with any sincere intention of carrying them out. They are put down in the nomination purely for the benefit of the Americans who feel that the participant program ought to be used to effectuate some program of change . The returning participant is disillusioned to find that he is put back into the job from which he originally went and his additional training is not utilized

How general were such reactions?

Appointment as a participant is generally much sought after (though the two most senior men among the seven interviewed were not at first keen on going) Allocation of participant vacancies is made to institutions in the regional joint meetings* after discussion between TCM officials and the group leader. Choice of men to fill the vacancies is mainly done by the college principal If he has an American team member at his institution and values his opinion, he consults him. The state governments of Bombay and Andhra convene selection committees of department heads to consider participant candidates (who are officers of the agricultural or veterinary medicine departments even though they may be teachers in colleges run by those departments) The group leader sits on these committees At one time Dean Hannah, when he was group leader, called all the candidates from his region to a hill station to get thoroughly acquainted with them, but in spite of the good reports from this procedure, no other group leader has followed the precedent

Though each principal gave his own definition and priority to the criteria for selection, these were the three actually applied The author found no evidence for the opinion of his first informant that they were not applied *bona fide*

* Gatherings of the contract team of Americans, the state directors of agriculture, and the heads of the agricultural colleges of all states in the region.

(1) Which department most needs strengthening by training its present head or grooming a successor? This was clearly the test in five of the seven cases interviewed, two of the principals had ranked all of their departments as to their need for upgrading

(2) Who can profit from American graduate training? Grades will show the success with which this test was applied

(3) Without being too old to learn, who is mature enough to know what to look for, to adapt rather than try to transplant American methods, and to have power and influence to put new ideas into practice? Only one of the seven who were interviewed had less than five years teaching or research experience at the time of his selection, only two had less than ten, and the man who probably profited most was a fifty year old department head who already had his Ph D

The Indian participants had been on the average ten years longer out of school and had reached a definitely higher station in life than the American graduate students who sat beside them in class. The part-time faculty adviser who coordinated their work at Kansas State College, had commented in an earlier interview that this caused a defensive reaction on their part, they wanted special treatment. It is true that the pressure on the participants was heavy because (with one exception at Kansas State) they all elected to earn an MSc degree within their one year in the United States. They were aware that their grades affected their future promotion when they returned to India. A few did try to get excepted from the rounded training which their American department chairmen prescribed, failing that (according to an Indian informant) these few took the easy courses among those required. But most picked up the load, "We used to sleep only from midnight to six." "The American MSc is not sufficiently appreciated in India because it can be earned in nine months. I worked as much in those nine months as those who earn a degree in two years in the U K or India." The one participant in the first group at Kansas State who elected not to get a degree nevertheless took a full load of courses for credit "Term papers and exams make you learn," he said. The best evidence of the ability and industry

of these men is in their grades Of the ten participants at the University of Illinois in the fall of 1958, four made straight A's, all the rest were progressing satisfactorily toward their degrees

The non-degree candidate at Kansas State found time during his year to get a month's full time experience working with a county agent For his future role as an instructor in extension methods, he regarded this as his most valuable training The non-degree participant in horticulture at the University of Illinois got the same value from his visits to grape and citrus experiments in other states For the degree candidates, such opportunities were restricted, though no less needed The answer might be to extend participant appointments to fourteen months With the exception of these two very able men, the seven participants interviewed regarded attainment of the MSc degree (except for those already possessing an Indian Ph D) as essential to a man's future promotion and eligibility to teach graduate classes

Kansas State College treated all participants alike Illinois, on the other hand, designated its post-doctoral participant a "Visiting Scholar" and made arrangements for him to do special research in his field of rumen metabolism and to make contact with the leading research in progress elsewhere The experience was ideally suited to this man's needs Kansas State has now made it a regular practice to give this special status to participants who come with a Ph D or equivalent advanced preparation Since participants are chosen for their strategic role in their institutions, rather than for any particular level of previous academic preparation, different levels of training in the United States have to be provided

Indians in America are as powerfully motivated as Americans in India to learn all they can of the strange culture, and bring back an account of it to their colleagues The participant program scored insofar as it provided opportunities for this extracurricular learning in representative situations, and with some background information In June 1958, for instance, sixteen of seventeen participants at Kansas State College made a six day

bus trip through nineteen counties of the state, visiting a variety of farms and farm services They placed a high value on this tour

The acid test of the participant program is the extent to which it results in significant changes in the way the returnees do their jobs To find this out the author did not ask "What did you learn?", but "What are you now doing differently?" Four of the seven reported significant changes already accomplished Two of these, having seen how their American professors drew course content from the practical problems of the farms in their country, have applied the idea 'Now I try to get all the knowledge about animal husbandry in India which can be organized, and teach that" A third, in charge of horticultural work at a college research station, reported

I've established varietal trials of grapes, citrus fruit, and begun on peaches I'm trying to change the fruiting season In my methods I use the principles of what I saw in twelve research projects in the U S I had the idea before, but hadn't started work, I wasn't sure of the way

This man's comment on the factors which limit his work throw an interesting light on the common fear that American trainees become dependent on elaborate equipment 'I want to do still more, but I need more land (50 acres instead of 5), more water, more staff . As to equipment, we can't use much of it . We may need it later on"

Three had instituted new methods of teaching "I took courses in extension methods at Fort Collins, at the Western Area Extension School The U S Department of Agriculture instructor really knew how to teach adults I use those methods here in training extension workers They create interest" Another reported "Every week, after college hours, we have a seminar of the post graduate students Enrollment has been thirteen and fifteen in the two terms A subgroup brings in a paper for discussion Last week it was on "Physiology of the Rumen I had tried to do this before I went to Kansas State But I didn't know how to hold their interest and after a few months it failed What interests them now is they have to think for themselves" Two other returnees had instituted classroom

quizzes The significance of these accomplishments must be measured against the traditional rigidity of the Indian curriculum and examination system.

Four of the seven who had returned had already applied what they learned in significant ways That is not to say that the experience was wasted on the others "I have started a simple trial on chemical weed control on sugar cane Though I'd started a weed control experiment here before, I didn't know enough of the theory to do it scientifically" But this man was frustrated because he couldn't get sprays and chemicals to expand what may have been an esoteric experiment Another, among the oldest of the seven, returned with "many new ideas about agronomy" But he had not tried to inject them into the formidable three year syllabus prescribed by the university board of studies He may have gone as a participant a bit too old to catch the contagion of new methods, while the other two who have not yet shown significant results are frustrated by what they consider the failure of their institutions to use their new skills They have been back only a few months, their situations may change

This evidence, taken as a whole, refutes the criticism that the participant program creates frustration Such frustration which has come about is minor, perhaps temporary, compared to the discovery and realization of capacity which has resulted Not only are the participants an outstandingly well selected and well used group of foreign trained Indians, they show a higher proportion of success over all than do the American technicians sent to India by the same two land grant colleges

There is another strong indication of the value of American graduate training in developing the kind of agricultural faculty aimed at by the University Education Commission and the Indo-American Team It is the case of the Agricultural Institute, Anand. This is a private college, established entirely by Indian leadership—initially by Sardar Patel and K. M. Munshi. It is the agricultural college in India where the principal is able to entrust his department heads with policy decisions in their fields, and where, at the same time, the often reiterated

proposals for reforming examinations, classroom methods, and use of the library, for instituting practical research and carrying its results to the cultivators have been quite generally put into effect Its principal, who had sent two of his faculty to the United States under the participant program, showed how much further he had carried the idea

Of course you know Anand is peculiar in the extent to which we have trained our faculty in the United States As of now, 12 have returned after received training abroad Half were in the United States, half in the UK Eleven got Ph Ds We have 13 of our faculty studying abroad right now and all 13 are studying in American agricultural colleges

Some Americans expressed the judgment that the land grant college program spent too much on equipment, too little on American technicians Some Indian institution heads said just the reverse No one proposed that less money go for participant training

EQUIPMENT

Equipment for Indian laboratories, research and demonstration work, and books for Indian college libraries are, budget-wise, an important part of the land grant college contracts Out of the original contract total of \$732,000, Kansas State was to spend \$200,000 for materials of these types In the revised contracts, \$520,000 was provided for materials, out of a total of \$1,793,000 To 1958, Illinois spent \$33,000 for books and \$150,000 for equipment, about one third of the agriculture contract total Some Americans raise the question whether grants of equipment are not the 'bait' which draws Indian institutions and state governments to accept American technical advisers, whom they are thought to be less anxious to have The author had an excellent opportunity to test this theory, for after eliciting from each Indian state director of agriculture or principal the aims of his own institution or department, he

then asked, "What has the American college contributed to those objectives?" Of the twelve whose answers were relevant to the point, four gave first place to equipment and textbooks. Two of these, in fact, did not mention the contribution received from technicians and of the training of participants until asked specifically about them.

It is not difficult to see why American equipment and books would be desperately wanted. First, though Indian agricultural colleges are sometimes supplied generously with floor space, they have been starved for equipment. "Except for the American help," said one principal, "even microscopes for undergraduate study would be unavailable." Since 1956, the curtailment of foreign exchange has sharply worsened the chances for an Indian college to get its own technical equipment. In material, furthermore, even small dollar grants constitute a much larger increase proportionate to existing resources than do the American contributions to manpower. One of the four host institution heads mentioned above, for instance, ran his college on a budget for all purposes of just under \$70,000 per year, whereas the books and equipment ordered for it in 1957 under the TCM college contract were worth \$48,500. Quantitatively, by contrast, an American technician plus American trained participants comprise only one-tenth to one-fifth of the college staff.

One of the host institution heads who stressed the value of equipment was probably not a man who sensed a need for advice. But another who valued equipment most highly was said by the technician who worked with him to make the fullest use of technical advice. It was not the institutions most empty of equipment who gave it the highest priority: one college lacked money even for glass tubing or basic chemicals for the undergraduate chemistry laboratory, but its head thought he needed a particular kind of American scientific and pedagogical advisement still more.

In this context, therefore, the significant finding is that seven of the twelve host institution heads gave credit to other contributions rather than equipment, participant training, or what had been done by the American technician in terms of research.

methods, a specific new program launched, or an attitude engendered of respect for farmers

Even so, there was a considerable failure to use books and equipment to full advantage, and an occasional failure to use them at all Underutilization occurs in two quite different situations The first may arise when a principal asks for American books for his present library, or equipment for his existing staff The problem is that in a culture which has for centuries been devoid of equipment, and in some aspects of its life has honored an indifference to equipment, there will be many individuals who do not know how to use it There will be a few to whom equipment has acquired the prestige of modernity and Westernization, but the value attaches more to possession than to use To illustrate through an error a very expensive dark-field microscope purchased under the contract was delivered to an institution for which it had not been ordered After it had lain for many months in its shipping container unused, the head of the institution still contended it was needed for teaching, though actually it was designed only for rather advanced research Firm interposition by the central government was required to get it transferred to a place where work was being held up for want of such an instrument This is an isolated case, more generally lack of equipment is symptomatic of a lack of people, procedures, and organization to use equipment Adding equipment alone will not change things But it would be wrong to assume that all, or even most, of the situations into which material has gone are like this Each case has to be appraised individually

One of the most general types of material assistance under the contracts was the supply to college libraries of several copies each of textbooks in the basic agricultural sciences Since few students have money to buy their own texts, the justifications seemed obvious But the books are lodged in libraries which may or may not be run to facilitate consultation of books by large numbers of students from day to day At Anand Agricultural Institute, the TCM-college books were already dog-eared, they were located in the general subject classification on shelves open to the students The author observed that the library was

open until 9:00 P.M. and in heavy use even on a national holiday, Gandhi's birthday. At other colleges American books were stored together in a case handsomely labelled "Gift of the U.S. Technical Cooperation Program," but locked, and in a library closing every afternoon at five. This is a problem that has to be tackled not as underutilization of American equipment, but as a problem of library management, and is being tackled in precisely that way by TCM and the Indian Council of Agriculture Research.

The other sort of equipment problem arises when an American technician, or a returned participant, needs equipment to do the job for which he was deputed or trained. The problem is not utilization, but timing, and it may be serious. At Anand Agricultural Institute there was the extreme case of a technician sent to establish a department of dairy technology. Since the equipment for his work had not arrived at the end of his two-year appointment, his experience was almost completely frustrating for him and useless to the college. The sequence of events in this case shows how complicated a process it may be to get equipment to India under the contracts.

Dr. William H. Chilson, dairy specialist under the Kansas State College contract, arrived in India on July 19, 1956. His job was to help set up an entirely new department of dairy technology at Anand, including a new building with new equipment, to provide training at the B.Sc., M.Sc. and Ph.D. levels. Anand was a well chosen location for such a program, the Institute had a private bequest to support the project. Dr. Chilson and the head of the Institute, Dr. M. D. Patel, submitted the list of dairy technology equipment which they needed to the Kansas State group leader in India at the end of 1956. They were asked to resubmit it showing the creamery equipment separate from the laboratory equipment. This they did April 1, 1957. The group leader forwarded it to TCM Delhi on April 4. TCM approved it and sent it to ICAR on April 10. In June, 1957 the ICAR asked Anand, on advice of other offices in the Government of India, to take boilers and vats out of the list and try to get them from Indian suppliers. This would cost

the Indian institution money which otherwise would be supplied by the United States, but Dr Patel complied He asked for quotations from all Indian firms who might supply these items, none in fact could He reinserted the boilers and vats and in September 1957 ICA approved the list for purchase by Kansas State In so doing, however, the Government of India stipulated that Anand must deposit Rs 70,000 in advance to cover the prospective cost of transport of equipment from Bombay to Anand, and Indian customs The question whether customs dues would have to be paid on the equipment was left open Dr Patel negotiated the Rs 70,000 down to a much smaller amount, and got the state government to underwrite the amount in lieu of a cash deposit In November the Kansas State home campus coordinator solicited bids Early in 1958 they were all in Now Anand and the Government of India agreed that the award should go to a firm willing to make the installation, and take subsequent responsibility The one firm willing to do this was not the low bidder, and was \$10,000 over the estimate This firm agreed to reduce its bid to the estimate for Anand, a non-profit institution It appeared, in September 1958, that the order could be placed But now the competitors also demanded the right to negotiate their bids downward In October 1958, many months after Dr Chilson had finished his Indian assignment, the order was placed Delivery was still six months to one year away There is in Anand a large, expanding cooperative milk processing plant The author asked its manager how long it had taken him to get delivery of his more complex dairy equipment, from the time of drawing up the list His answer was, 'Six to eight months'

There is confirmation here to the rule of thumb expressed by TCM officers, that a technician should not be brought to India to work with American equipment unless the equipment is already on the ocean by the time he leaves the United States But this rule raises another problem, who is going to order the equipment before the technician gets to India? There is no neat solution

The two Indian institutions which had tried most prudently

to anticipate the equipment needs of their American technicians by ordering it before they came, had, in spite of the best intentions, failed to get workable apparatus. One institution had the prospective technician mail a list of needed equipment in advance from the United States. The institution's comptroller insisted on the substitution of smaller-capacity apparatus which was cheaper, and unworkable. Selection by advance correspondence with the technician might work for simpler equipment if the group leader could bring into the decision the opinion of another technician in the specialized field who happened to be in India in the employment of TCM or another college. For complex equipment, there seems to be no solution short of sending an expert to India on a short term consulting basis to requisition the equipment at least a year before the American technician is to start work with it.

Aside from the special problem of equipment needed for the work of a technician or returned participant, it is entirely possible that a better approach might be made to decisions about equipment. These decisions are now made by a process analogous to the way annual college equipment budgets are prepared in the United States. The group leader asks for a proposed list from each institution, it is prepared by the principal with the advice of his American technician if there is one, all lists are reviewed by the group leader usually in the regional meeting of all host institution heads and technicians, and the total reduced to fit into the contract's annual equipment budget. It might be that, considering the radical departure which American equipment may mean to Indian institutions in terms of quantity and personnel required to use it, a more appropriate analogy would be the method by which American college departments get special foundation grants. This is perhaps what one American technician and one Indian institution head meant when they suggested to me that equipment requests be considered on a "project basis." Rather than asking all principals to consider their overall needs for equipment, the proposal is to invite requests for new projects in particular departments, each project showing how personnel, budget, space, organizational, book and equipment

needs would be provided for, as well as the end results proposed to be obtained. Institution heads would thus be invited to think of how to use, not merely how to get, equipment. Review of requests would be done on the spot by the group leader, or at his request by a technician familiar with the departmental field. Procedurally, this would probably require that the group leader's equipment plans, at least in terms of priorities, be built up over most of the year, as institutions could be visited, and that the annual or semi-annual regional meetings of technicians and principals be an occasion for getting an understanding of the bases of selection among project proposals, and the collective determination of priorities for general emphasis in coming years. Some group leaders come pretty close to this approach now; the need for it is becoming much greater once the fairly standardized requirements of reference texts and basic teaching equipment have been met.

Above all, equipment is only a means to an end. Sometimes it is an absolutely essential means. Sometimes human ingenuity can substitute other means. In lieu of the American equipment he had expected, Professor Warren R. Schoonover helped the chemist and agronomist, Messrs. Tripathi and Lal, of the Balwant Rajput College, Agra, to improvise equipment to test soil salinity. They built the hydraulic conductivity apparatus, for instance, using old tin cans. No doubt there were some valuable lessons in self reliance in the experience.

CHAPTER 4

Land Grant Colleges: Education Policy

The five land grant colleges at work in India aim considerably higher than the provision of technical assistance. The aim is the reorientation of all higher education in agriculture by relating it to research and extension work, and by pointing it toward the needs of the rural population. This overriding purpose guided the allocation of American college assistance to five regional divisions of India, it is asserted by the Americans who come as technicians and group leaders. It is the ultimate yardstick against which their work must be judged.

RURAL UNIVERSITY IN U P

Late in 1958 the large Indian State of Uttar Pradesh (U P) created by act of its state legislature the *Krishi Vidyalaya* or Agricultural University. Here is a case directly evidencing the methods, the problems and the opportunities of international cooperation toward the exacting aim of institution building.

The proposal of "rural universities" for India originated in 1949 with the University Education Committee, the body of which Dr S Radhakrishnan was chairman and which included among its ten members two Americans Dr Arthur E Morgan and Dr John J Tigert. Even in a remarkable report, the chapter entitled "Rural Universities" was extraordinary in several ways. It called for reconstruction of rural education

from the primary school up, following in general Gandhi's pattern of work-centered or basic education. The aim was clear 'Rural life should be made so interesting and productive, so full of opportunity and adventure, that it will be preferred. The aim of rural education should be to make it so' Toward this difficult (some would say impossible) aim, both the folk tradition of agriculture and the traditions of science and the learned professions must contribute "Here, then, we have the dilemma of the rural university It would modernize agriculture, but must work with farmers, often with men burdened by ignorance, credulity and conservatism, while they possess the wisdom of the ages"

One can see in this chapter ideas characteristic of Arthur E Morgan of values inherent in small town living, as against urbanization, of the need to teach the virtue of simple living. The treatment of agricultural education here strikes a slightly different note than the report's earlier discussion of the American land grant college and its applicability to India. One is reminded of the difference between the two institutions of which the American members had been presidents, Dr Morgan of Antioch College, and Dr Tigert of the University of Florida. But the vision of a rural university seemed to have a special relevance to India.

As a general type of arrangement, it is suggested that a rural university would include a ring of small, resident, undergraduate colleges, with specialized and university facilities in the centre. Rural college students may spend about half their time at studies and half at practical work. The tradition should grow among successful men that simple and unostentatious living is the only way of life which comports with the spirit of new India.

The creation of rural universities, inheriting the spirit with which Gandhiji infused the basic education movement, offers opportunity for giving a fresh impulse to such a change *

* Report 1947-49, op cit, pp 575 79

The Commission's vision reached far enough to take in the possibility that rural universities might, after they had stoutly established their own traditions, spirit and methods, be absorbed again into a common structure and direction for all Indian higher education. In the meantime, they must stand as departures. But they would be departures in setting, teaching methods and ideals, rather than in subject matter content. "The great cultural values are not peculiarly rural or urban, but are common to all humanity." The two institutions which the Commission proposed for development as the first all-India rural universities were Tagore's Visva-Bharati at Santiniketan and Jamia Millia near Delhi*. Both represented a spirit of selfless service to rural India. Neither had gone far in developing the agriculture sciences, pure or applied.

This point is of some interest because the steps which have at last resulted in the establishment of India's first rural university, though they have been powerfully strengthened by the Commission's 1949 report, have come from a rather different direction. Indeed, two of the leading proponents of the present rural university remarked to the author that they were pleasantly surprised after they had hit upon the idea of a rural university for India, to find that the University Education Commission had urged it three or four years before.

In 1951-52, very early in the life of the United States Technical Cooperation Mission in Delhi, that mission provided an opportunity for two officers of the U P state government to go to the United States. These were Mr A N Jha, then secretary for agriculture, later chief secretary, and Major H S Sandhu, director of the sixteen thousand acre state farm, newly carved out of the malaria and tiger infested belt at the foot of the Himalayas. These two men were so powerfully impressed by what they learned about the land grant colleges of the United States, and so imaginative regarding the Indian possibilities of such a development that they cut short their American tour to get home to prepare a government decision to institute a new agricultural university in their own state. In the short run, their

* *Ibid* p 547

initiative did not bear fruit But from that time forward they were informed and dedicated proponents of the idea They wanted all the help they could get from the United States sources to define their plan and carry it out

During the next three years there was a steady increase in the contact of Indian educational and agricultural leaders with the American system of agricultural research, teaching, and extension An outstanding educational statesman, K M Munshi, who was the central Minister of Agriculture at that time, surveyed agricultural education in the United States in 1952 and thereafter gave strong backing to the use of some of its ideas in India In U P, the University of Illinois was maintaining its faculty assistance to Allahabad Agricultural Institute

Two major steps toward a rural university were taken in 1955 As we have seen, the Government of India joined the TCM in Delhi in launching a joint study of agricultural research and education in the two countries, looking toward improvements in India, especially through the most efficacious use of TCM assistance The five Indian members of the joint team spent three months in the United States and visited six land grant colleges This group included the two key men in the Indian Council of Agricultural Research, the head, Mr K R Damle, and the secretary, Mr J V A Nehemiah, as well as the head of the central veterinary research institute, the head of the central department of agriculture, and the West Bengal director of agriculture The Americans included the director of crops research in the United States Department of Agriculture, Dr A H Moseman, and two land grant college men Dean of Veterinary Medicine E E Leasure of Kansas State College, and emeritus dean of Iowa State College Robert E Buchanan

The *Report of the Joint Indo-American Team on Agricultural Research and Education* gave powerful endorsement to the earlier idea of rural universities Rural universities would permit a fresh start toward the solution of many existing problems teaching and examining methods, isolation of veterinary medicine and home economics instruction from agricultural instruc-

tion, location of some agricultural colleges in big cities, cut-and-dried syllabi, and the division of responsibility for higher agricultural education between state department of agriculture and existing universities. The Team did not expressly differ from the concepts of the earlier University Education Commission, and yet it is inescapable that a tacit change had come over the form of the rural university idea in the change of sponsorship.

The Commission had come to the idea of rural universities as a solution to the problem of university education in India, the Indo-American Team saw it as a solution to agricultural problems. The first concern of the Team was with the strengthening of post-graduate teaching and research in agricultural (in the broad sense, including veterinary, home science, and agricultural engineering) subjects. The University Education Commission's view of the need of rural students for a general education covering the common ground of the humanities, social sciences, and basic natural sciences, but taught with rural illustrations and combined with vocational training for rural careers was tacitly replaced by the idea of education in the agricultural sciences. The "ring of small, resident, undergraduate colleges, with specialised and university facilities in the centre," was endorsed, but it had been transmuted into a ring of colleges of agriculture, veterinary medicine, home economics, agricultural engineering and industries, and 'applied' liberal arts and science. The Team said of this last college:

It should be an institution giving an excellent basic training in the sciences and arts, *but with special emphasis upon their application*. This college should serve two principal purposes. It should take over the basic training required for certain subjects and their application to agriculture, veterinary medicine and home science. Here could be taught the basic courses in chemistry, genetics, botany, etc. This college of liberal arts and science, in other words will have as one of its functions a service relationship to the other colleges. The college should also have the independent function of giving specialized train-

ing in the underlying sciences for producing such specialists as agricultural statisticians (and) food technologists

Entirely absent was the 1949 Commission's strong urge to induct rural students into the great common traditions of man's culture *

By 1955 India had been divided into five regions for assistance by land grant colleges under TCM contracts This fact, plus prospects for strong post graduate work in agriculture influenced the Team in designating the best prospects to become rural universities Uttar Pradesh (at the Terai State Farm), West Bengal (at Haringhatta Agricultural College), Orissa (Bhubaneswara), Travancore Cochin (Trivandrum), and Bombay State (Anand)

In 1955, also, Associate Dean Harold W Hannah of the Illinois College of Agriculture began his work in Uttar Pradesh He came first in April, along with Illinois Professor R W Jugenheimer, plant geneticist, to survey the situation in north India as a preliminary to negotiating the TCM-University of Illinois contract for regional technical assistance When the contract was signed, he returned in October as leader of the Illinois team The U P government had, however, asked him to do a special job It was to draw up what they termed a 'blueprint' for a rural university on the Terai State Farm The farm was on the northern edge of the region in which the Illinois team worked but Dean Hannah indicated his sense of the importance of this part of his job by locating his own office there By this time Mr Jha had moved up to become chief secretary The new secretary to government for agriculture was a young active minded officer of the Indian Administrative Service, Mr K A P Stevenson He worked closely with Dean Hannah, was personally dedicated to the rural university goal, and eventually in 1958 went to the United States to see the land grant colleges

In a few months, Dean Hannah had his blueprint ready

* Report of the Joint Indo-American Team op cit pp 54-5

and the ICA published it for all-India circulation. It included the skeleton of a draft bill, draft rules for promulgation by the Governing Board of the University, an organization chart, a suggested budget estimate, and a rough sketch of a physical layout. Dean Hannah had been asked to prepare a program for action, the Blueprint for a *Rural University* was that. The form of institution it contemplated was not substantially different from the ideas of the Indo-American Team.

Dean Hannah had expected action could be taken on the proposal during his two-year term in India. This did not happen. The state administration approved the plan quickly, committing land and some materials. But funds for construction had to be obtained from the central government, within India's Five Year Plans. At least two issues had to be disposed of before the central government could support the U P scheme. One grew out of its departures from the original University Education Commission proposal. That proposal, in a somewhat watered down version, had crystallized in 1955 in the plan of the Education Ministry for rural institutes. These institutes were to be small and to emphasize the social services rather than the full development of agricultural sciences, but to prevent confusion with them, U P agreed to call its institution an agricultural rather than a rural university. The other question was whether the central funds for a new agricultural university should go to U P or to another state. At this point the four years of preparation by U P culminating in the Hannah Blueprint proved decisive. No other state was ready to go ahead. Pandit G B Pant who had in 1955 become union Home Minister after ten years at the head of the U P government, was a most powerful champion of the cause. In August 1957, the Government of India approved the plan. Dean Hannah had just gone home.

The state secretary of agriculture, Mr K. A. P. Stevenson, now possessed the initiative in moving toward state legislation. A high level administrative committee was appointed to further the project. The Illinois group leader and the head of the TCM agriculture division met with the committee. The Planning

Commission had required, in approving the scheme, that the Rs 20,000,000 required to get the university started be found within the state's existing five year plan total Mr Stevenson solved this problem by locating, within his own agriculture expenditure plan, approximately that much money that would otherwise lapse The remainder of 1957 and 1958 was devoted to drawing up and getting passed the proper state legislation The first draft was prepared by the law department of the U P government

At this stage, the strongest exponent of the American land grant college point of view to the U P government was not an Illinois representative, but an agricultural educator working with Dr Frank Parker in TCM, Dr Ephriam Hixson After a career in which he had been associate dean at Nebraska, and dean of South Dakota State College, Dr Hixson had recently been brought to India to advise the Indian Council of Agricultural Research on the integration of research, extension and teaching throughout India His desk was in the Indian ministry offices Dr Hixson believed in being frank with Indian officials, even if frankness meant criticism To him, the first bill drafted by U P would have produced a conventional Indian university and not an agricultural university of the kind visualized by men like Stevenson, Sandhu and Jha, and he told the U P committee so

One objection Dr Hixson had, as well as the Illinois group leader in U P, Dr L E Card, to the draft bill was that a majority of the members on the university's governing board would be state government officials To Dr Hixson's suggestion that a majority be non-officials, the answer was made that it would be difficult to find capable non-officials not motivated by some kind of personal or group interest Dr Hixson offered to submit a list of suitable candidates, many more than would be required In this manner, several of the provisions of the bill were negotiated The Illinois and TCM position was reduced to certain basic provisions on which they would not yield As they saw it, the U P agricultural university was intended by the state to attain the objectives of a land grant college, it was to

require extensive American assistance. The objective could not be attained, nor the American aid usefully employed, if the basic features of land grant college administration were to be ruled out in the legislation itself.

In October 1958, a bill was worked out which met these minimum requirements and which the state administrators thought could pass. It was considered by the cabinet ministers at the political level, revised, approved, and set for introduction in the state legislature on November 17. But U P politics was not running smoothly. Taking advantage of a food shortage in the eastern part of the state, opposition members of the legislature staged a demonstration in the legislative halls, their leaders were jailed. Not wanting to take up a long term measure under the circumstances, the chief minister of the state considered postponing the agricultural university bill until the next session of the legislature in the spring of 1959. The consequences of further postponement might well have precluded further assistance by the University of Illinois. Recruitment of advisers to the new university would have been upset, TCM would have had to let lapse the 1960 money which it had earmarked to assist the new institution. Again, TCM spokesmen were firm. When the U P cabinet understood that their only chance of getting assistance lay in an early decision, they introduced the bill in December. It was referred to a joint select committee, which made minor modifications. One committee member, who had been elected by a special constituency of university graduates, dissented from the favorable recommendation on the bill. He found it too drastic a departure from the traditional university charter, he objected to a university designed expressly for any sector of the public, as this was for rural people. The bill did not, however, arouse general controversy. Within the month it was enacted, ten years of the most varied kinds of international collaboration had born fruit.

At one stroke, U P's decision had freed instruction in the new institution from the rigidity and formalism for which all existing universities in India have been roundly criticized from detailed prescription of curricula, texts and examinations by out-

side boards, from overdependence on final examinations, from too narrow and too standardized courses of study. The kindred subjects of agriculture, veterinary medicine, and agricultural engineering were united on one campus. Such unity is unique in India. Arts and home economics would be added later. The new university was given the job of research as well as teaching. However, no existing research institute or college in the state was turned over to the new university, there was need in the huge state of U.P. (population, 63 million) for many agricultural institutions. To the key question of the university's responsibility for agricultural extension, the legislation seemed to contemplate the solution already employed in several other states—the testing and teaching of extension methods in pilot areas, but not administration of the state's going extension program by the university.

The text of the act also gives us preliminary data to appraise international collaboration—did the Americans accurately foresee the hazards to the joint aim, and make them understandable to their Indian colleagues? The chief departure one can read on the face of the act from the land grant college pattern is the reservation to the state government (the cabinet of ministers) of power to control the internal administration of the university. This takes two forms, the power of the government to make rules on certain matters, including the manner of appointment of teachers and the establishment of departments of teaching, and the power of the state's non political head, the governor (who, however, acts on advice of the cabinet) to disallow or remit for further consideration any rule made by the university board. This hazard is certainly limited by the fact that such governmental intervention must be made formally and probably subject to public scrutiny. The hazard was foreseen clearly by Dean Hannah:

There will no doubt be a tendency for the legislature and for the Government officials involved to wish to go as far as possible in spelling out the internal details of organization of the University—a complete listing of all departments

ments, college by college for example In my opinion, this would be a mistake *

If one believes in the absolute necessity of university autonomy in internal administration, as did the University Education Commission and the Indo-American Team then one can say that the effect of firm foreign advisement on this matter was to keep the possibility of winning it from being foreclosed in the legislation The outcome depends on the board

On the key question of the composition of the board, also, one can see the effects of negotiation and compromise A majority of the board are certainly to be appointed from outside the state bureaucracy In fact, to guarantee that, the act stipulates in detail the sources from which all but two of the non-official as well as the official members are to be named Besides the directors of agriculture, education, and animal husbandry, there are to be representatives of each house of the legislature, of the state farmers' forum, the state welfare board (a woman), of the U P cooperative bank, the registered university graduates and the engineers' association It will not be easy to find, within these specific categories, the individuals of independent mind and broad experience in affairs who are needed to give initial character to the university, and at the same time to defend the distinctive form it takes But it is not impossible The chief hazard of a board which might become absorbed in the hierarchy of state government is removed a considerable distance

This case thus throws light on one very general question of international advisement. How firm should the adviser be? Or looking at it from the host government's standpoint, how far can one go in negotiating governmental decisions with a foreign adviser? Two rather obvious assumptions must be clear at the outset. A foreign representative can, of course, only make decisions concerning what his government is going to do It was only regarding the question of whether ICA funds and future American land grant college advisers could be useful that a

* H W Hannah *Blueprint for A Rural University* (Lucknow U P Government, 1959)

TCM or Illinois spokesman could, in that sense, be firm. The other point is that it is, as in this case, the stage of developing an assistance contract, not operating one, that properly raises major issues on which the parties might differ.

But assuming these features of the agricultural university case, the fact remains that negotiation did take place upon a matter which is very near the heart of any government's prerogatives, the content of a proposed law. The foreign advisers fixed minimum requirements, both as to the content of the bill and the time in which it must be enacted in order to permit aid to be given pursuant to it. It is very difficult, at least for an independent American observer, to see how a law could have been achieved, capable of reaching the objectives of the University Education Commission, of the ICA, and perhaps even of the state government itself (which declared in introducing the bill into the legislature that it aimed at the pattern of the American land grant colleges), had these minimum requirements not been asserted. However that may be, the fact remains that firmness at that stage has not prevented the TCM and the University of Illinois from being viewed by the top U P government officials as necessary advisers in the subtle matters of organizing, staffing and giving initial direction to the new university.

An ill informed interpreter of these events might be inclined to say that the U P government was indecisive, and therefore needed a firm hand from outside, or contrariwise, that the Americans had interfered with the sovereignty of the state. The facts point to a very different conclusion. It was the very determination of men like Jha Sandhu and Stevenson and the ministers in U P as well as of central government officers, to bring their country the values of the land grant colleges that made negotiations possible in the first place, and brought them to conclusion in action in the end. Firmness otherwise would have produced only an impasse. To put the matter in general language, firmness is compatible with an advisory role insofar as there is agreement on needs and objectives. We can be quite sure that this case is covered by that principle for two specific rea-

sons The needs of the U P government were not visualized by U P officials in abstract terms about which there could be real, though unconscious, differences with the American advisers What U P wanted, after its officers had twice studied them on the ground, was something like the American land grant colleges The state officials therefore could be confident that men from those colleges shared and understood their objectives, whether or not they knew much about the Indian scene or Indian terminology The second reason is that the U P officers who were officially carrying on the negotiations were not necessarily personally committed to the points of difference with the Americans, even as to major questions of method The first draft of the bill, for instance, was the work of law department rather than the agriculture department Where major departures from tradition were required, men who had run land grant colleges could make a more convincing case for them than men who had only studied them The main reason U P has an agricultural university is because some men in responsible positions in the state decided to establish one, the minor reason is that a few outsiders, who were experienced in the field, told them frankly what pitfalls they had to avoid to get one

At the time of writing, the U P agricultural university consists of an act, a site, a general commitment of finances, and a very able administrator (for Mr Stevenson had just been appointed to that temporary position) Until the board is appointed, and the vice-chancellor, until the first requests for specific appropriations have been met, and at least some of the department heads gathered, one can only dimly visualize the prospects Some of the factors on which realization of the aims will depend can be stated.

The first point is that it would be impossible to overestimate the long term consequences of success or failure in this enterprise, mainly for India, but also for the United States Whatever else develops at the new university, it stands a very good chance of concentrating top quality scientific talent and harnessing it to the problems of agriculture at the state level, where agricultural changes must chiefly be carried out It has a second potentiality,

perhaps equally promising It will be free (as only one other public college or university in India is) from the bonds of unproductive teaching methods, prescribed syllabi, outside examinations and probably free from administrative methods which destroy the initiative of a faculty There is the bare possibility, thus, that it will be able to give absolutely first rate intellectual standing in India to the education of youth to solve the country's rural problems No transformation of Indian life has been more overwhelmingly accepted as necessary, and so generally frustrated

But the risks involved in this enterprise are as great as the potentialities The problems in founding an institution and the demands they make on the host government and especially on the foreign advisers are very different from those involved in building up an established institution To make the point tangible, U P happens to have an agricultural college, a private not a state institution, which could conceivably have been enlarged and strengthened into an agricultural university That is the Balwant Rajput College, Agra If the state with its American advisers had chosen to start from here, they would have started with a vice-chancellor and a dean, several faculty members, the nucleus of a student body, part of a farmer clientele, all tested adherents of the same general purposes that animated the agricultural university project in U P Institutional autonomy would in that case have been a firmly-rooted tradition, not dependent on legislation and its interpretation The point is raised here not to challenge the wisdom of starting fresh, for it is quite possible that an entirely new institution will have a dramatic impact on India commensurate with its risks, but to make clear that the burden assumed by foreign advisers in this situation is unavoidably much heavier

Those building the new university realize this, U P officials originally proposed that the United States supply a vice-chancellor for the university's first five years Neither the University of Illinois nor TCM judged that a foreigner ought to handle the executive control and the public relations responsibilities this would require But under its new technical assistance

contract, the University of Illinois has now been asked to supply an adviser to the vice-chancellor, deans of each of the three colleges initially to be set up (agriculture, veterinary science, agricultural engineering and technology) along with a farm management technician to assist the manager of the Terai State Farm. This challenges the University of Illinois to send to India on two-year assignments several men at the level of deans which is a bigger job than any of the colleges now operating TCM contracts have faced. Illinois has not yet committed itself to releasing any of its own deans. But it has begun to appreciate the dimensions of the responsibilities being thrust on it. Early in 1958, the dean of the Illinois College of Agriculture brought to India with him to assess these prospective responsibilities a member of the Illinois board of trustees, Mr Earl M Hughes. Early in 1959, the university sent to India the campus co-ordinator of assistance to India, Professor Ralph Hay, and the vice-president in charge of administration and overseas programs, Dr Royden Dangerfield. These men should be able to present the issue before the trustees for a decision.

Assuming that three or four men of the calibre of deans can be provided, the fact remains that the formative roles they will have in discovering the mission of the new university are of an unprecedented character so far as American college work in India is concerned. To sketch two of these issues will illustrate the point.

(1) The university site is a sixteen thousand acre mechanized farm, a frontier newly cleared for habitation. It has been and most of it must in the future be operated with the goal of maximum production and income. The university will be supported partly by that income. The conditions of cultivation, and the psychological and sociological setting of agriculture here are more like American conditions than Indian. They are completely different from the state's agriculture generally. The average size of farms in U P is 4.8 acres. Can the university accurately sense and give first attention to the state's ordinary farm problems? Can the farmers in the state realize the university is doing so?

(2) This institution is planned for boys who feel they belong to farming. It is certain that those boys will not command good English. It is certain that the level of scientific work which the university will do cannot be done for a number of years in Hindi or Urdu, the two somewhat related mother tongues of the state. How will the two new goals of this institution—to improve actual farming and farm life and to do it through science—be reconciled in terms of language of instruction at the various levels of teaching?

The situation which a fresh start creates might be categorized this way. The state is deliberately doing something so new that it cannot be sure Indian executives will appreciate the objectives immediately, so it is turning to experienced foreign direction. The foreign deans will appreciate the objectives, but they will be operating in a situation so new to them that they will scarcely be able to draw on their previous experience. The situation certainly presents a challenge. It will only present a dilemma if either party to the international cooperation underestimates what the situation requires it to contribute, or how incomplete that contribution is to do the total job.

INTEGRATION IN OTHER STATES

The regional land grant college program is aimed at an all-India development. Its success must be measured toward the reorientation of agricultural education not only in the Terai University, but in the remainder of the vast state of Uttar Pradesh, which has a population of 63 million, and in the other thirteen states of India.

Three years after the Indo American Team recommended immediate consideration of five rural universities, one other shows promise of development within the next few years. It is West Bengal's institution at Haringhatta. This instance demonstrates the wide usefulness of the rural university idea to India, for the impulse in the state government is coming even more strongly from the education department and the chief minister

than from the agricultural officials. The great turbulent metropolis of Calcutta has proved a chronically disturbed environment for higher education. West Bengal is in the region for which the University of Missouri has the contract to supply technicians. Though Missouri has been able to recruit no other technicians to work in the state, group leader Arnol W Klemme is working closely with the ministers of the state in the joint project of setting up a rural university at Haringhatta.

There is no other strong prospect of the development of a rural university in the near future.* Integration of education research and extension is making progress however, in less dramatic ways. In the Punjab the Ohio State Team has established a unique influence. Working in fact as a team, they are able to help each institution define its part in the development of an agricultural education system for the state as a whole. Dr Russell O Olson, group leader, knows the situation intimately after three years in the region. The state director of agriculture has adopted the objective of drawing the heads of all agricultural research sections to Ludhiana, where the state agricultural college is being developed. To the college is attached one extension service block, whose director of extension is the college principal. The director of the department of agriculture is not now prepared to carve out a sphere of autonomy for the agricultural college from the department hierarchy and yet, in the end the whole agricultural education effort in this state may be reoriented more thoroughly than in U P.

Madras is in about the same position, but has got there with little on the spot American advice. In 1957, the director of agriculture and the head of the state college of agriculture at Coimbatore visited the United States and Japan to get ideas for the application of the Indo-American Team proposals to Madras State. After their return, the state set up a committee to explore the idea of turning the state agricultural college at Coimbatore,

* In 1955 Bombay State considered legislation to build a rural university around Anand Agricultural Institute and a neighboring institution. The move was overwhelmed by the political stresses relating to the proposed partition of Bombay State.

with the adjoining research institute and home science training project, into a rural university. But the committee decided this pattern did not fit Madras. The principal reason was that Madras, like other Indian states, has a heavy and very important action program reaching the villages through the agricultural field staff and the extension network. This is not education, though education must be closely coordinated with it, and the state could not justify giving direction of it to a college or university. Madras therefore met her needs by creating an extension section in the college at Coimbatore. Its job is to teach extension to students of agriculture, and to act as a communication channel between the teaching and research staff in the college and the farmers. But the control of the agricultural and extension field staff remains under the department of agriculture directly.

This decision, which was thoughtfully made with considerable knowledge of the American alternative, casts a new light on the question of "firmness" in advising that Indian governments adhere to the American model. There is a point of view held among one or two TCM officers that a decision like that of Madras is a retrograde step, because it differs from the pattern of land grant colleges. But it is very important to note that the authoritative study of the pertinence of the land grant college model to Indian conditions, the report of the Indo American Team, recommended specifically that agricultural extension administration be kept under a joint director of the department of agriculture, just as Madras has done, rather than under the colleges. This was in spite of its abstract conviction that extension is logically a college function.* Advisement which holds out only the American model helps a state whose leaders have decided that is what they want. But it simply does not make contact with the thinking of those officials of Indian states who regard their situation as necessarily different, and who want

* Report of the Joint Indo-American Team op cit, pp 31, 67, 94
H W Hannah's Blueprint for A Rural University proposed that the rural university only gradually establish its claim to do extension work by showing it could do it better than the state government hierarchy.

to solve the distinctive problems they have in order to reach the same ultimate goals the land grant colleges embody A brief look at the substance of the use of extension and the agricultural colleges in India will show why that is true In 1952, on the best American advice, India decided its rural extension should deal with the needs of the whole village That means helping villages with problems of agriculture, but also of malaria control, irrigation water, roads, basic schools, sanitation and certainly credit. Though uncertain whether this was the proper ultimate solution the Indo-American Team based its recommendations on that multiple purpose scope * That raises a question whether a college of agriculture can supervise extension which is partly non agricultural. Secondly, Indian departments of agriculture are now in the business (for which there are private and cooperative institutions in America) of actually getting seeds and fertilizers to the farmers, and other departments are furnishing credit, all through the village extension service It might be well to put these action programs in other hands eventually but as long as there are no other hands, it is hard to see how a college could serve its own functions well if it were saddled with this Thirdly, India has a long way to go to develop local responsibility for extension equal to the American county's role, meanwhile directing a state extension service will be much more of a managerial job than it is for the American land grant college Those who hold out for the land grant college pattern do not deny these points, but neither do they seek to help the Indian states work out lines of progress which take account of them

There is a strong case to be made, as much in Madras as elsewhere, for getting the agricultural college out of the department of agriculture's administrative hierarchy But this case rests on educational grounds and it is weakened in the mind of a state director of agriculture by advice that the college should also be given the present Indian extension job

Advising on the solution of a state's own problems must chiefly be done by advisers attached to that state The results

* Report of the Joint Indo-American Team op cit., p 66

of the first round of land grant college technicians in the fourteen Indian states are extremely varied. If we consider the six states strong enough in agricultural resources or degree of development to give a lead to the remainder, we find this situation the Punjab, U P and West Bengal have received and used advice effectively—the Punjab continuously, U P from H W Hannah, West Bengal only recently from A W Klemme. Advice to Madras has not been influential. Andhra has been well advised by one technician, but not in a continuous way by a group leader. Bombay, which probably has the most progressive agricultural education in India through the state college at Poona and the private one at Anand, has received no informed policy advice at all.

At least four factors were responsible for the variation:

(1) Each team had responsibility for two or three states. The team had a greater impact on those states—U P, the Punjab, West Bengal and Andhra—in which the group leader located himself, and less on those states—Bombay and Madras—where he was an occasional visitor.

(2) A group leader who stayed more than two years increased his college's impact. This is true of Dr Olson of Ohio State in the Punjab and Dr Long of Tennessee in Mysore.

(3) Those group leaders who succeeded in mobilizing the thinking of their team members, with their varied professional insights and their contacts with different Indian institutions, upon the over-all problems of a state gave stronger and more realistic advice. This was most true of Ohio State. An agricultural economist or rural sociologist on a team was an especially valuable source of "staff" assistance to the group leader, if the group leader himself did not have one of those fields of specialization.

(4) The personal qualities required for advising a state government are quite different from those required to demonstrate a new program in a college. In America itself, a man who functions successfully as a consultant to a department of agriculture on essentially government matters is not necessarily the same type as a successful college department head. In India

the distinction is increased by the fact that the Indian Administrative Service men who chiefly influence decisions on the plans for agricultural education are young men who are very energetic and articulate and who do not necessarily in the beginning appreciate the full importance of scientific expertise or have a practical grasp of farm management "You could do anything with him" said a very progressive Indian administrator of an adviser to whom he ascribed first rate success "hunt, talk, write a persuasive memorandum, convince a group of cultivators or steer a committee to the right conclusion" "Send men who are articulate," said the head of one of the three or four agricultural colleges which most nearly approaches the Indo-American Team's recommendations "Perhaps because we had to learn it as a foreign language, we Indians tend to discount a man who can't express himself forcefully in English"

There is another way of thinking about the success of the regional efforts It is to try to balance all the decisions taken in the direction of the agreed objectives for Indian agricultural education against those decisions which go off at tangents In the north central and central regions, it is probably only a minority of the developments which have been in the desired direction Dean Hannah, the group leader in these regions who came nearest to influencing the highest level state decisions, himself published a similar conclusion Referring to the clearly defined objectives of the University Education Commission, Indo-American Team and other authoritative groups, he writes

Despite these reports the State of Uttar Pradesh has, in recent years established a veterinary college far distant from the Government Agricultural College, a new agricultural university at State Farm, Terai is being contemplated without weighing its relation to existing programs the plant physiologist was separated from other research sections at the Government Agricultural College, Kanpur Apparently, also, land is being taken from this college without any decision having been reached that the college is to be moved or its program changed so that it doesn't need this land So far as I know, no over all and com-

petent committee or review group has been established to consider all these problems,—as well as others about which I am certain I have never heard—in their relationship to one another *

This candid appraisal must be seen in perspective All of the Indian states are undergoing a drastic shift from government by a small elite group to government by a large and yet undefined group of political leaders Decisions on the location of public institutions, as the governor or chairman of a legislative committee in many an American state could testify, are among the most difficult to subject to the rational calculation of costs and benefits On top of that, the program of advising had only got under way when the Indian states passed through the most unsettling of experiences short of constitutional upheaval—the redrawing of their boundaries The states reorganization in 1956 affected central India most of all, it remade three of the four states in the two regions assigned to the University of Illinois and Kansas State College—Madhya Pradesh, Andhra, and Bombay—and left only U P largely unaffected This may not be unconnected with the fact that U P officials could, much more than others, give some attention steadily to long range institution building

The integrated pattern is not being made the predominant pattern for the current wave of new institutions But that may not mean failure For if there is in each state at least one faculty doing high quality research on practical problems of agriculture and demonstrating an extension program in a group of villages, then presumably the superiority of this system of organization will win out over the traditional methods in the competition to produce more benefits for the cultivators The time for attaining the present goals will merely be put off

Recognizing then that the present effort to guide the building of institutions has more likely been a partial success than a

* *Development of Agricultural Education and Research in North Central India* (Urbana University of Illinois in cooperation with the International Cooperation Administration, 1958), p 12

failure, and that the opportunity to plan institutions could not be a general one in the Indian states in 1955-58, the fact remains that insofar as opportunities might have arisen to help a state make over-all plans, the American teams, perhaps with the exception of the Ohio State group, could not have been prepared for that role.

The first reason is that in the most difficult immediate organizational problem that of bringing agriculture and veterinary medicine into close relationship, the Americans themselves were and are disorganized. For the job of providing veterinary experts to each Indian region is not the job of the land grant college assigned that region. Kansas State College has the veterinary medicine contract for all of India. This provision has facilitated the enlistment of one distinguished American professor of veterinary medicine, Dr I D Wilson, who advises the Indian Veterinary Research Institute. But it has made possible the recruitment of only one other American veterinary expert for India. And it has not made available to each state an adviser who could convincingly explain to the state director of veterinary medicine why his educational and research and extension work would be better done in conjunction with the agricultural education. And yet, if there is an argument for putting veterinary medicine on the same campus and in the same department with agriculture in America, that argument is far more urgent in India, where the health of cattle and of most other animals is limited principally by the supply of feed and fodder. Aside from the fresh start in the U P agricultural university plan, there has been no important administrative step toward integrating veterinary with agricultural work. There has been an expansion of animal husbandry work in the agricultural colleges.

Apart from this special problem, the limits upon the land grant college teams' capacity and utilization to help the states plan their agricultural education were basic matters of organization and intention. The obvious prime requisites for advising in such a planning effort are

(1) Advisers must have experience in this kind of planning. That means informed advice must be obtained from deans,

vice-presidents, trustees as well as from college department heads

(2) The advisers must be thoroughly informed about the conditions in the state, including the potentialities of the existing institutions and the agricultural needs, area by area

(3) Indian decision makers (this certainly means secretaries of ministries and may also mean ministers) must desire to make long-range plans toward the agreed objectives and attach some value to outside advice in the process

(4) The state's political situation (using the word in the broad and not party sense) must be sufficiently stable so that plans can be made and held to

Assuming no further requirements and assuming also the existing problem of releasing high level American administrators for long assignments in India, one can see that the way to go about making a state plan would be to bring a dean of agriculture and of veterinary medicine, possible also of home economics, and a trustee to India for two or three months. They would have to come after the college team had been in the state for a year or more to provide the basic information for planning. And there would be no occasion for bringing them unless the directors of the departments of the state concerned were prepared to work alongside them for two or three months to draw up the plans. This might well follow a visit to the United States by the most influential agricultural policy makers in the state. In any event, these men would have to understand and adopt the general goals.

In short, if a state is to plan its agricultural education, the job calls for the same procedure that produced the national plan—a high level Indo American Team. No American would think of going about advising an American state on its basic plan for agricultural education in any less careful, less broad visioned way. There is an assumption, almost a cliche, of commentators on Indian government that the states carry out the "one best policy laid down by the national authorities. But certainly that is not an assumption American land grant college men can accept as a basis for their work with the states. It is

not the facts of American federalism that make that true It is rather the facts in India, which we have seen again and again in this chapter, that the various authoritative recommendations of all India scope contain within themselves several 'best ways,' several emphases or priorities, as indeed they must, considering the variety of conditions in the fourteen Indian states The goals having been defined nationally, plans to integrate extension, teaching and research in agriculture have to be state plans And they can only be made by planning not by technical assistance That means a drastic shift of the initiative, policy level advisement and administrative leadership of the American effort out of Delhi and into the regions

This recommendation is directed no less to the colleges than to TCM A college which wanted to organize its Indian effort adequately to make plans, under the present conditions, could do so On the other hand, Dr Frank Parker, head of the agricultural division of TCM has such an unmatched grasp of the Indian agricultural situation, and such high prestige in the states, that had he chosen to challenge the colleges more explicitly to make this kind of effort, each in its own region, more of them might have responded adequately

But in making this recommendation it is all the more necessary to remember that fourteen states could not possibly have been prepared to plan their agricultural education simply because a national commission, or even two of them, had brought in certain recommendations Opportunities to plan occur when all the necessary factors coincide—administrative, personal, political, economic No one could say in advance when that would happen in a particular state, certainly it could not be in the same year for all states Hence the great need for a flexible, not a uniform or rigid, pattern of work by each team in each state The regional allocation of teams has great merit in this connection For a team may find one of the two or three or four states in its region ready to plan though the others are not But this consideration also calls for latitude for each team to select the assignments of individual American technicians

Even concentration of American contributions on integration

of education with research and extension should not be reduced to a nation-wide rule It should normally be expected that each region might use one or two American advisers to do the kind of pilot job Dr Albertson did on grasses, whether or not it is organized in an educational institution This is true not only because the state may need help before it is ready to make a successful plan, and because in India's potentially desperate need for food production, much else besides integration of research and extension in the colleges deserves priority in the national interest It is true because integration of extension and research with teaching must be approached from all three directions, not just from the colleges It may be asked "Should not help for departmental programs come through Americans employed directly by TCM, leaving the land grant college teams to help the colleges and research institutions?" Not always For the demonstration of the direct economic worth, public acceptance and administrative feasibility of a definable program, whether it be grasslands improvement, poultry, or the control of salinity and waterlogging, may be the key contribution in correcting the present not wholly unjustified assumption of Indian political leaders and administrators that agricultural college staffs are not helpful when it comes to preparing action programs There may be no better way to open the door for a reorientation of agricultural education Ordinarily, of course, the college team will best serve in colleges The point is that the latitude must be left with the land grant college and the state to use advisers where they think they can serve the agreed national goals

MEETINGS AND SEMINARS

In addition to advising on the formal organization of the system of agricultural education, Indian-American cooperation has taken the less formal channels of joint study and discussion Throughout India, three principal channels have been used extensively

Twice a year, as a rule, the college principals, agriculture

and veterinary administrators and the American team members hold regional meetings to consider plans and operations of the joint program. Most of the time is taken up with recurring operations under the contracts: selection of participants, book and equipment orders, the approval of institutions in the region to receive the help of technicians. Group leaders strongly wish that the regional meetings could be concerned more with long-range plans, and especially with the classification of objectives. Sometimes it happens. In January 1958 the northwest regional meeting (the Punjab and Rajasthan) substituted for the formal agenda prepared by the Indian Council of Agricultural Research a more searching consideration of the institutional development situation in the two states. The fact that the states within a contract region normally have little interest in each other's plans is one limitation to this kind of discussion. In February 1957, the state of Uttar Pradesh itself held a three day conference in Lucknow to consider the state's own long range problems and opportunities. Recommendations originating in sub-committees on teaching, education and research were sent to the cabinet of the state government.

In May 1957, sixty Indian agricultural educators assembled from all of the states for their first collective consideration of methods of teaching. The ideas injected into the one week seminar came from Indian and American faculty members and college administrators. One index to the effects of this session is that the delegates from Madras, on their return, initiated a similar seminar for the agriculture faculties within their own state. In 1958 a second all India seminar on teaching methods was conducted.

The most comprehensive meetings concerned with the policy goals of the land grant college contract program are the annual sessions of the Indian Council of Agricultural Education. In 1958, this body, meeting at Bangalore, considered the implementation of recommendations growing out of the earlier meetings and seminars, and engendered some serious debate on policy matters. For instance, the secretaries of agriculture of

U P and Madras had an opportunity in this form to justify their states' different reactions to the rural university idea

One of the strong potential values of these meetings and discussions is that they lower the barriers of hierarchy to information which originates at various levels and in different departments and states. It is apparent to the outside observer that these barriers are by no means down—men of lesser rank are usually quiet when a high ranking officer has spoken on a subject. On the other hand, progress is being made. In the 1958 seminar on teaching methods, for instance, six subcommittees brought in reports on the *same* set of problems, so that differences of opinion were assured in formulating recommendations. Secondly, since all these meetings cut across administrative lines, they act most effectively on problems which do not require serious administrative decisions. These have been good channels, for example, to get agreement on what Indian textbooks are needed in agriculture, and to give recognition to individual progress in writing them. Third, these meetings do reveal to those who have budgetary and administrative powers some of the practical obstacles to implementing reforms. In this sense administrative action may follow. After it became clear in the two teaching methods seminars that libraries in the agricultural colleges were not maintaining student access to stacks because they could not afford to lose even a few books, the ICA instituted an insurance scheme which will cover the possible losses. Perhaps in the long run one of the most valuable outcomes of this form of discussion among ranks, among states, and with occasional participation by the foreign technicians is the opportunity provided to uncover new potential leaders in the field of agricultural education. This is true within the states and regions, it is even more valuable at the level of the nation as a whole.

CHAPTER 5

Teacher Training and Domestic Science

In the field of teacher training, Ohio State University has completed a modest sized government contract for technical assistance to India. The University of Tennessee has fulfilled a contract in domestic science. Both contracts are being renewed with slightly modified objectives. This is an appropriate time to review the methods and results of each. After presenting the facts of the two cases, we will examine issues and conclusions they suggest for college work in India generally.

CASE I EXTENSION TRAINING IN EDUCATION

In 1955, India was completing a remarkable expansion of education under her first Five Year Plan. Children of secondary school age (fourteen to seventeen years) in school increased fifty-nine percent in the five years. But that great effort had started from so low a base that at the end of the plan less than one in ten children of that age group would be in school. Further expansion was required, and in the second plan the 1950-51 secondary school population was scheduled to be doubled. Actually, so great is the enthusiasm for education in India, that the goal for 1960 had been achieved by 1958. Still, only twelve percent of the children of high school age were being educated.

In the midst of this doubling in eight years—a quantitative expansion similar to that which is called a "school crisis" in a

highly developed country like the United States—India found it necessary to change the purposes of her secondary schools. The old system, training a tiny segment of the youth, and those from well-to-do homes, could be pointed exclusively at preparation for universities. An American dean of education compared it to the situation in American education in the 1890's. But India had little time to accomplish the change. If the expansion of enrollment occurred without changing the old orientation, the result could only be disastrous pressure on the universities, and after that, further educated unemployment. For India's new needs were for thousands of trained farmers and agricultural extension men, draftsmen, skilled mechanics, foremen and supervisors, organizers of cooperatives, primary teachers. And with the widening of vocational aims went an urgent need to change the impact of the schools on the character of the pupils. What was needed, now that there was no imperial discipline to take its place, was training in self-discipline, productive discipline, and responsible citizenship.

With great foresight the Education Minister, the late Maulana Azad, had in 1952 enlisted an able international commission to make definite recommendations on these qualitative changes. *The Report of the Secondary Education Commission* in 1953 stands like the University Education Commission's work, as a long-range and completely authoritative guidepost for the immediate programs of change. Instead of separate schools for vocational education, it called for inserting those subjects in general secondary schools (which would now be called multiple purpose schools). Catering to students most of whom would not get further formal schooling, the secondary school stage would be lengthened by one year. Broad and yet specific changes were called for in the method of instruction, examination, guiding extra-curricular activities, relating the schools to their communities, and the counselling of students; the schools would train personalities, not merely minds. To suit the broader purposes, the language of instruction was to be changed from English to the regional language, but both English and Hindi or another second language were to be taught extensively.

By 1955 some very small beginnings had been made towards implementing the 1953 report. Some of these drew on American help. The United States Education Foundation had used the Fulbright program to bring to India for one year appointments leaders of workshops for secondary teachers. The Ford Foundation had at one stage supported workshops. It had also brought well qualified educational consultants to India, including Dean F. Champion Ward of the University of Chicago College in 1954. He later became a Ford Foundation staff member in India, and had a greater impact on Indian education than any other American. In 1954 also, the TCM brought out two members of the University of Wisconsin education faculty for two year terms, Dean John Guy Fowlkes was an adviser to the central Ministry of Education and had his office in the Ministry, Professor Clifford Liddle was the chief educationist for TCM.

The fundamental changes needed in secondary education were much the same all over the country. Initiative in defining them had come from the central government. Yet whereas the central government had certain delegated constitutional powers over higher and vocational education, schools were clearly delegated to the states. Meanwhile, the states were floundering with the drastic recommendations of the Secondary Education Commission, they lacked money and had to give priority to setting up more primary schools. The central Ministry decided to play a major role in what it had come candidly to call "the reconstruction" of secondary education, through grants in aid. It had begun casting about for methods to promote the spirit along with the form of the reconstruction in the states. In the search, Deans Fowlkes and Ward had specific parts.

The real problem in the states was to get the teaching profession interested in the changes. There was not money to set up new teacher training colleges, nor was there time. In this situation, the idea of giving supplementary training to existing teachers through the existing teachers' colleges seemed strategically sound. Dean Fowlkes found a steering committee already called into being by the Ministry, consisting of professors of education from the state training colleges. They were interested

in improving language teaching, science demonstration work, better texts and libraries, and making the visitation of schools (inspection is the Indian term) constructive Fowlkes decided to move in exactly the same direction

On his advice, the TCM allotted approximately \$850,000 for the supply of books, jeeps, and audio-visual equipment to make extension work by the teachers colleges possible Along with this rather large commodity assistance, TCM also provided funds, and the Indian government agreed, to enlist a team of educational technicians from an American university for the project After almost getting a contract with the University of Texas, Dean Fowlkes in 1955-56 got Ohio State to accept the responsibility

Meanwhile, in October 1955, the Ministry of Education had established the All-India Council of Secondary Education This body grew out of the work of an international study team* and was initially supported by a small grant from the Foundation It was in several ways a departure from the usual governmental body in India While governed by a twenty-one member representative body, it got its drive from its director, Mr S Natarajan, and other key staff people, Mr A R Dawood and Miss Sen Gupta Mr Natarajan was brought to Delhi expressly for this purpose, after long experience as a high school teacher and head of the Madras association of school teachers He considered himself a teacher and an organizer The Council opened its offices, not in a government building, but in unpretentious rented quarters between Old and New Delhi In short, it set about doing what it was supposed to—to solve the practical problems of the state school systems in reconstructing secondary education, not by directives but by educational methods

As host to the Ohio State team, the All India Council not only shared the contract objectives, but was dedicated wholly to them Moreover, the contract defined the team's mission clearly 'to provide technical assistance to 54 secondary school

* Ford Foundation Representative in India, *The Ford Foundation and Foundation Supported Activities in India* (New Delhi: Ford Foundation, 1955), pp 73-4

teachers training institutions located throughout India, which will enable them for the first time to provide extension services to teachers who are teaching in the secondary schools." The job had been further delineated into subject matter fields. Dr Griffin had been selected to give special advice on teaching social studies, Dr Michelson on science, Dr Sutton on testing, and the group leader, Dr C B Mendenhall on languages and teaching methods. The team was distinctive in that all members were drawn from Ohio State's own faculty. One result was that they discussed their mission among themselves frequently before coming to India.

Three of the four members of the team reached India in October 1956. The fourth who came early in 1957 was withdrawn after three months, he unfortunately did not have a suitable temperament for foreign advising.

Despite all the careful planning of their mission, the team was surprised to find that the All India Council had only been notified of their arrival by the Ministry of Education a week in advance. The team set up shop in one room of the All-India Council offices. For six months they studied the situation. Then they began a regular program of field trips which took them outside Delhi more than half the time. Mr Natarajan would come in with a project on which the All India Council had been asked to help. It might be to help the faculty of a teachers' college in Mysore plan and conduct a workshop for high school teachers on improved methods of science teaching. It might be to provide a consultant to a seminar on language teaching methods, a consultant who would draw from the group itself the methods found to be most successful in their own experience. The team members would decide whether they could help, and how. They would go out as agents of the All-India Council, usually along with one of its own staff.

At the end of slightly more than one year of intensive work by the American and two years of work by the Indian representatives of the All India Council the tangible results were unimpressive. Of the fifty-four teacher training institutions in India for which extension service departments had been projected,

fifty-three had active departments There had been twenty-three when the project started On the average, each of the extension programs reached seventy-four high school teaching staffs in a radius of fifty miles Of India's 200,000 high school teachers, 80,000 had been involved at least to the extent of participation in a workshop

The qualitative impact, which is the important one, has to be appraised by professional educators When the American group leader was asked whether the round of seminars and workshops had really altered teaching in the schools he replied

We worked in the only way you can work to effect a change that depends on the understanding and implementation of scores of thousands of teachers scattered all over India You can't order that kind of change, at least until the top men see they have teaching staffs who can change .

The thing that makes me happy about my two year period in India is that now I get the feeling that there is the same general ferment among high school teachers and principals and parents and children in India that we had in the States in the 1920's when we were changing our methods of instruction

I wish you could go with me to Ahmedabad I saw a high school there where the kids came from the families of textile workers But they were part of an experiment in modern education methods The children themselves could give you a better statement about why they liked the new system than the headmasters could, or the professors in the teachers' colleges They were eager to talk They said, 'Before, we learned everything out of a book Or we sat and listened and looked at the blackboard Now what we learn comes out of our lives, and out of this city, too We ask questions, and we have a chance to decide things for ourselves We see things whole "

One evidence of Dr Mendenhall's own appraisal of his team's work is his degree of personal interest in it Unfortunately, a few months before his term was over, he suffered a

health problem which was serious enough to require him to go to Japan, then to the United States for diagnosis and surgery. Two and a half weeks later, though the doctors' prognosis was not yet entirely good, he was on the plane back to India to finish his work with the All-India Council.

CASE II HOME ECONOMICS

In 1954, when the University of Tennessee considered its India project, the field of home economics, or home science as it is called there, was new to India. Six years before, the University Education Commission found it "unfortunate that courses in home economics and home management are held in low repute." It recommended a large extension of work in the field, and a raising of quality.* Since that time three universities had come to the fore. Madras had domestic science in four colleges, the highest quality being in a mission institution, Women's Christian College, which was ready to start graduate work in nutrition. Delhi University's Lady Irwin College, an institution recently established by the energetic efforts of a national women's association, was training home economics teachers for bachelor degrees. Its graduates were wanted all over India for high school teaching. Baroda, under the leadership of a distinguished woman vice-chancellor, Mrs Hansa Mehta had a college of home economics as a fully fledged part of the resident university, with its own building and a staff of ten. In 1954 it had three graduate students in home management and child development—the only graduate students in the field in India.

The new college discipline was organized through the two year old All India Home Science Association, led by Mrs B Tara Bai, head of Lady Irwin. She raised the question of American assistance with Dr Ruth Wright, TCM educationist, and Miss Levice Ellice, a TCM home economist who had for

* Report 1947-49 op cit pp 395, 7

two years been advising on that aspect of the new village extension program about American assistance called community projects It was agreed that an outstanding American home economics educator, Dean Jessie W Harris of the University of Tennessee, should visit India to find out what help might be given In twenty-three days of July 1954, Dean Harris visited the institutions mentioned above, as well as a few others She proposed that an American contract team be brought to India with a broad purpose of strengthening home economics in higher education But she identified four specific needs as most deserving of the team's attention (1) the further strengthening of undergraduate work in foods and nutrition at Women's Christian College and the introduction of graduate work in that subject and in institutional management, (2) the introduction of graduate work in home economics teacher training at Lady Irwin, (3) the extension of Baroda for graduate work in child development and home management, and the establishment of home economics education for rural extension workers there, (4) the helping of Mysore University to get its home economics building, and making it the national center for in service training of existing home economics staff There was here the germ of a nation-wide plan for key institutions in different specialities, each developing an MSc level program during the next three years

The University of Tennessee took on the contract responsibility In October, 1955, six of the eight team members reached India, the team was complete by July 1956 It was a highly qualified team Three members were department heads, a fourth was assistant chief of the home economics education branch of the United States Office of Education Five of the eight were from the University of Tennessee faculty and two more were former members of it, now at other universities Two members were assigned to Lady Irwin, including Dr Berenice Mallory, who represented the team in Delhi as deputy chief of party Three assisted the four cooperating institutions in Madras One went to Baroda, one to Bombay where the Shrimati Nathibai Damodar Thakersey Women's University was

trying to launch a big new home economics program. The party chief, Dr. Mary Elizabeth Keister, was stationed at Bangalore with the added individual duty of helping establish a laboratory in child development.

The team had an impact on the new and formative discipline of home science in India that probably cannot be matched by any other contract program in India. These are some of the evident results:

Members gave detailed advice on floor plans, furnishings and equipment for new physical facilities at six of the eight institutions. At Bangalore, this meant advice on the construction of an entirely new building.

There was a thorough revision of curriculum at six institutions. The American technicians commented on the proposals, helped the college deans and staffs clarify their desires, suggested new subjects, texts, and practical problems. Baroda asked the entire team of eight to assemble there for one weekend to consult on a major curriculum revision. Copies of the proposed revision were circulated to the team in advance. The team drew out from the Indian staff members in their specialties suggestions for further improvements. The changes, which lengthened the period of generalized home economics training to two years and shortened to one year the period of specialization, was introduced in 1957-58.

The technicians advised Lady Irwin and the two Madras institutions on the design of programs of graduate (MSc) instruction. The Lady Irwin program was submitted to Delhi University for approval, the Queen Mary's program was approved by Madras University, the Women's Christian College program in Institution Management and Dietetics was opened in 1957. One of its features is a period of internship as practicing dietician in a hospital or other large institution.

During vacation periods in their host colleges, the team members acted as consultants to plan and conduct summer short courses for existing high school teachers of home economics. It is interesting to note that they were asked to and did participate in one such course in 1955, two in 1956, six in 1957.

They made deliberate arrangement for the development of the younger staff at their host institutions. For instance, they got lecturers to plan and teach the summer schools, got them to draft curriculum revisions. The technicians at Shrimati Nathibai Damobai Thakersay suggested that drawings of the floor plans and laboratory layout for the home economics floor of the new building be prepared by the two SNDT participants who were then at the University of Tennessee. The planning became a special supervised term project for them in their graduate work, and gave them a new sense of confidence and responsibility when they returned to India.

On at least three occasions, the team initiated or helped plan sessions of the entire Indian profession, or of home economists with deans or government administrators where the methods and content of home economics education were re-examined. The discussions advanced the definition of home economics somewhat beyond the cooking and the needlecraft stage. Team members were very effective in explaining the proper conception of the field to the University Grants Commission* and to vice-chancellors.

Books and equipment were supplied to each of the cooperating colleges.

Eleven Indian faculty members were trained for one year at the University of Tennessee. Five of these were back in India ready to carry on before the American professors left.

LESSONS FROM THE TWO CASES

We can see a good deal more about these two cases of international assistance if we now compare one with another. Though the professional fields differ, there are other differences and similarities so salient, against the background of all TCM-university contract work, as to be easily discernable. Let us note first the similarities in the given situations which confronted

* A central government appointed body which sets standards and grants government funds to universities

those who planned and conducted the work In both cases the job was to exert an all-India impact by means of a handful of Americans and limited facilities of equipment and participant training The means were very limited in both cases, as compared, for instance, to the resources devoted to agriculture The domestic science team was wont to report that of all technical assistance programs in their field in fifty-four countries, the Indian effort was the only one that tried to cover an entire country at once

There is another similarity which is difficult to show, it has to do partly with the field of work, and partly with its status in India Perhaps we can put it this way neither domestic science nor secondary education stood near the top of the ladder of power and prestige in India All professions are apt to see themselves in a similar light, but certainly engineering and even agriculture can make a less valid claim to being underdogs in a hierarchical social order This fact of modest status created some opportunities and some problems rather similar for our present cases Now we can see the differences and similarities in the manner of approach to the job

1 Preparation The secondary education project was one of the best prepared in India, certainly the best prepared of those covered in this study The domestic science contract was not so well thought out and agreed to This was true at the vital points The All India Council of Secondary Education, host organization of the Ohio State team, had been expressly created for the purposes the team was to attain, it had money, staff, enthusiasm There could be no problem to finding "counterparts" in this situation The All India Home Science Association was equally dedicated and enthusiastic, but of course lacked staff and money Host institutions for the home economics team were nine colleges Two of them did not fully understand or agree to what was being done At Baroda, this was partly because of a change of deans at the time of the team's arrival, at St Christopher's in Madras, it was partly because of the charge of Rs 15 00* per day per technician imposed on the institutions by the Ministry

* About \$3 00

of Education after the initial negotiations In every case, there was difficulty getting a counterpart with enough time from her ongoing duties to work with the team members on innovations Perhaps no amount of advance preparation could have solved this problem Still more basically, the *Report of the Secondary Education Commission* had laid down an agreed pattern of change, there was no such clear conception regarded by all decision makers as authoritative (even though they might not be ready to move to it) in home economics The team itself saw this and worked continually to get a broader vision of the profession accepted In the teacher training field, as vast and scattered as any to which assistance has been given, the techniques by which the team would work toward this pattern of change had been painstakingly worked out in advance They knew before they came to India they would be working through extension training centers (indeed, this is what appealed to Dr Mendenhall to accept the assignment) Methods were not selected in advance for the Tennessee team, as Dean Harris commented on her return visit in 1957, "all possible channels that development of Home Science in India might take were included as permissive under the contract"

As to the incidentals, the mechanics of preparation, on the other hand, the secondary education contract was quite cavalier The \$850,000 of equipment and books was more than was needed for the methods of work (though it may have been helpful in getting the initial intergovernmental agreement) and the selection of equipment and books did not strike the Ohio State team as prudent Participant billets provided in the contract were not used These matters are very impressive to auditors and legislative investigators, and they ought therefore to be controlled They have almost nothing to do with the success of the job

Inadequate preparation of the home science project was not due to any lack of foresight or effort on the part of the University of Tennessee, which not only sent out Dean Harris for the survey, but also sent Dr Margaret Fedde, campus coordinator,

to check up on the situation a year later before the team members arrived at their posts. It was due, rather, to the lack of American domestic science policy makers experienced in India, and capable of reaching decision making levels and to the lack of anyone who corresponded to Deans Fowlkes or Ward. It was, more basically, due to an earlier recognition by the Indian authorities of the importance of secondary education. To this extent, the somewhat amorphous mission of the domestic science team was a necessary next step in a less developed field.

2 University Commitment In both cases the contracting university was fully prepared to do what was necessary to carry out its obligation. The evidence is that Ohio State drew all four of its team members from its own faculty, the University of Tennessee five out of eight (among the five were three department heads). This is not only one obvious prerequisite for success, but it lays the foundation for another, team work.

3 Team Work These two teams can stand as models of mutual reinforcement, of the successful combination of specialization of professional fields with group consultation, and of the demonstration in India of the dovetailing of effort far beyond a command relationship. In spite of the perversion of the words by salesmen in the United States, we have to call these achievements team work. How did they do it? The team members themselves were inclined to explain that they came out as colleagues, and worked hard at strengthening their solidarity. These statements are correct. Dr. Mendenhall, group leader of the Ohio State team said:

We met frequently before we came over here. This was possible because we were all from Ohio State University. After we got here, we discussed every policy decision as a group before we took any decisions. When we started out, every month we had meetings of the three of us together with our families. We discussed what we were doing. This helped the wives see the reasons why their husbands had to be away from home. All of us have our headquarters in Delhi and that has helped us develop a collective attitude toward our work.

The Tennessee party chief wrote

This "team spirit" has been achieved as a result of three things, I think (1) our having known each other fairly well as individuals and professional people before coming to India, (2) our feeling an allegiance to and the backing of one sponsoring University, and (3) our having had an opportunity of meeting together frequently since we have been in India

The Tennessee campus coordinator adds

The idea of the "Team Approach" was not planned but developed gradually After the first meeting of the seven technicians in December 1955, all the staff members began to sense how much stronger the program could become if they could meet periodically They meet every quarter for three days

It is evident from the nature of their group meetings that these were not called because it was good administration, or because it was necessary to get a common view of methods or mechanics They were held to decide policy and strategy in order to get a clearer view of the job to be done For instance, the twelve criteria by which the Tennessee team regularly judged their own progress were thought out in their first quarterly meeting, then revised a year later If our two agriculture teams met at all on the matter of participant selection, it was usually to go over the specific list, the domestic science team met first to think out what purposes could best be served by participant training, and then drew up a set of criteria for selection, advising and placement

Second, the group meetings were held to overcome specific obstacles to collective work, spatial isolation in the case of the home economists, the potential conflict of family and work loyalties in the case of the education team Both of these points demonstrate that the basic reason for team work was concensus of purpose or to put it plainly, all members thought of the job as a team job and wanted to get it done Otherwise, one suspects, so far are techniques from being sufficient to create

solidarity, that the very burden of frequent long group meetings would have created dissension

The fact that team work came from the sense of a team job became very clear in both cases when major pieces of work were tackled collectively. Illustrations from the home economics case are the group advising on the revision of the entire Baroda undergraduate curriculum, the group consultations at summer schools, the group planning and participation in the September 1956 conference of home science administrators and faculty members.

American faculties (one suspects all faculties) are inclined to discount team work as either sloganizing or the occupational hazard of the *Organization Man*. A brief note may be needed as to why it is a good thing in contract work overseas. First, negatively, the frustrations that pile up at the outset (some supposed, some real) call for some kind of explanation to oneself. The sponsoring organization or TCM or the foreign country as such can be made the goat, creating psychological barriers to progress. Or the individual can redefine his job as doing something in the context of these frustrations. Comparing notes with other team members is almost indispensable to the second view. Further, it is only a team that could conceivably affect anything so diffuse as the discipline of domestic science in India, or secondary teacher training. The team character of the job is very genuine, it is probably more so than any work that falls to professors at home. Thirdly, one very general kind of demonstration that Americans want to and should bring to a democratizing country is that of cooperation not ordered by superior authority. It is hard, among people sophisticated in the distinction between claim and conduct, as any people who have cast off an imperial power must be sophisticated, to make much of that demonstration if the demonstrators do not function as a team. To cite a negative and most uncharacteristic instance, the failure of two members of one of the land grant college teams, who were attached to the same college, to get along with one another was pointed out to the writer by the principal of a college four hundred miles away.

4 Relationships with Indian Nationals "This is a contract we had no trouble renewing," said a TCM officer of the University of Tennessee contract. "India wanted more" When asked how their work could be evaluated, the group leader of the Ohio State team gave a somewhat parallel answer. "The thing to look for," he said, "is whether they ask one of us back again after they have participated in a workshop with us"

The heads of host institutions thought of both teams as being "our own" consultants A few illustrations will help explain why
From Dr Mendenhall

We made an early decision that we would work under the directions of the All-India Council of Secondary Education unless those *directions conflicted with our contract or* with the needs of education as we conceived them according to professional standards but conflict has never arisen . On one or two occasions I was asked to do something by people other than those on the Council To these invitations I said, "You put this proposition up to Natarajan (director of the Council) If he wants to do it I'll consider the invitation "

The Ohio State team's determination to identify their mission as an Indian mission was symbolized by their agreement as a team "never to make a speech about how it's done in America" The only man who broke the rule was the one who had to be sent home soon after reaching India

The case of the home economics team was technically different, since their jobs had not been clearly defined in advance and agreed to in specific terms by host institutions But the team relied exclusively on educational methods to get the field of home science redefined They had enough confidence in those methods so that the reports on the project, including their own contribution to it, made to deans and administrators in the nation-wide home science conference of September 1956 were made mostly by Indians

This is not to imply that letting host country nationals make the decisions is a universal criterion of success There are situations where Dr Mendenhall's proviso, "unless those directions

conflicted with our contract, or with professional standards," would become real and important, where the "firmness" we came upon earlier would be appropriate. That situation did not arise for the Ohio State team because its mission was the mission of its host, the All India Council. It did not arise for the Tennessee home science team because as a good team in a discipline new to India its professional authority was ever respected. Manners, techniques of dealing, and sincere good will made relations with Indian nationals good, but they could come into play only on such solid bases of consensus.

5 Priorities in Present Contract Programs Did the work of the American universities move toward the long term goals as effectively as could be, within the resources provided? The data of this study (and probably any data now available) fall short of yielding an answer. We can ask intermediate questions. Did the programs show clearly conceived priorities among possible methods of working toward the goals? On this score, the program of extension training of secondary school teachers is far superior, indeed it is outstanding among all assistance programs. But this test may give a superficial value to concentration of effort. How are we to know that the method given priority was in fact the most effective? From this viewpoint perhaps the fairest question to ask about the deliberately broader domestic science program is what loomed up as the most likely obstacles to further progress? Did the program tackle these? Was it concentrated in the direction and to the extent that the obstacles were concentrated? In seeking answers to these questions we can make use of the running comments and reports of the domestic scientists themselves, and of the initial and periodic surveys of domestic science administrators.

Domestic Science, Special Problem of Priorities Dean Harris, quickly surveying the field in 1954, reported that undergraduate education, graduate education, and in-service training had all to be strengthened. But the first two were related. "In the changing standards for university work the minimum requirement for college staff workers is the Master's Degree. This requirement makes it urgent that a program for graduate work

in home science be initiated immediately if Home Science is to hold its own in the college and university program of India" When the team got on the ground, the urgency of that need became even more apparent At Bangalore, for example, with an enrollment of 295 college students in home economics and a new building, the teaching staff consisted in 1956-7 of one Ph D, one MSc and five lecturers without graduate training —most of them recent graduates of that same college The team's thoughtful second annual report again called the need for graduate training "urgent" One effect of the contract was to train eleven participants to the masters level Meanwhile, the number of higher educational institutions offering home economics had risen to about forty, to say nothing of the present staff shortages and needed expansion of the older departments

Where is qualified faculty coming from? In 1958, two colleges were actually giving education at the masters level Baroda which had the longest experience of graduate training and good all round facilities, had a capacity of about four MSc's per year in nutrition and four in child development But that was dependent on replacing the TCM technician who had taught child development with a person trained to the Ph D level In 1958 Baroda had found no such recruit Women's Christian College, Madras, offered a master's degree training in Institution Management to four students per year—not many of these could be expected to be available as teachers—and an MSc in nutrition by research Lady Irwin College was to soon begin graduate work in nutrition and in home economics education, Queen Mary's was authorized to start That was all The shortage of trained college faculty that loomed ahead was obvious enough to call for a comment by a committee of Parliament reviewing the field of university education in India

The Committee learnt that most of the teaching in Home Science and Home Management was confined to the undergraduate level and as such did not come under the purview of the University Grants Commission at present

The Committee were informed that the major difficulty in the expansion programme was the shortage of

qualified teachers . . . The Committee recommended that early steps should be taken to introduce Postgraduate teaching in Home Economics subjects in various universities and that the University Grants Commission should also take up the expansion of facilities for Home Economics and Home Management at the undergraduate level *

The faculty shortage is serious not alone from a quantitative standpoint. One finds, in the team's reports, the names of four Indian women who have doctor's degrees in home economics. Three head faculties to which the American technicians were attached, one is leading the program of home science education in the rural extension program of the Ministry of Agriculture. There are a few other women available to give direction to the discipline, not many. There is an immediate danger that the pressure of mushrooming departments on the time of these few potential policy makers will so preoccupy them as to leave the profession without guidance. In its first quarterly meeting, the University of Tennessee team was struck by this need to free the few gifted leaders of the profession from teaching and administration so they could give a sense of direction to the field.

The need is very specific on two fronts. Research and writing cannot realistically be expected either from the lecturers lacking post-graduate training who are teaching very large classes, or from the handful of women trained to the masters or Ph.D. level who are heading departments as well as teaching full time. There is little prospect that texts can be written dealing with Indian situations. Until there were more college teachers with post-graduate training, the American domestic scientists had realistically to conclude that it was out of the question to do the research necessary to help solve actual problems of nutrition, economics of household management, sanitation or the personality development of children under Indian conditions.

This problem is interlocked with a second one—the obscure

* Estimates Committee 1957-58 Seventeenth Report Ministry of Education and Scientific Research University and Rural Higher Education (New Delhi: Lok Sabha Secretariat, April 1958), p. 48.

public mission of the profession There are in India today two virtually separate movements in domestic science The one we have been concerned with is in the colleges The pressure of enrollment comes from the families who have money enough to educate their daughters, and who want to prepare them for marriage These families are urban, well to-do and Westernized It is not hard to adapt American methods to their needs But these girls constitute a rarified stratum of Indian life, in 1955-56 there were 97,000 girls in colleges and universities of all kinds—less than one percent of all Indian girls of their age group On the other hand are two programs to take homemaking education to the masses, one in the national extension service, which needs five thousand home demonstration workers, another through the vocational courses in the secondary schools, where one thousand home science teachers are needed at once The organization of these programs has been separate from the college domestic science movement, not only on the Indian side, but also on the American The American land grant college programs, for instance, include provisions to send American domestic scientists to agricultural colleges to introduce training for the women's portion of the extension service

This split is dangerous to both movements The hazard to the present college movement was made very dramatic by the state government minister who inaugurated the new home science building at Lady Willingdon Teachers' College in Madras Home science will deserve the support of India, he said frankly, when you can teach girls how a family may live better on Rs 100 a month On the other hand, the teaching of the subject in the extension service and the multiple purpose high schools will be sterile if it is deprived of the self-criticism which scientific research makes available at the university level No one realized this earlier than Dr Rajammal Devadas, chief home economist of the Ministry of Agriculture who expressed concern even in 1956 lest the mass teaching of home science be established at the "cookery and needlecraft" level of intellectual content All these considerations underscore the early insight of the University of Tennessee team that home economics

desperately needs self-direction and a clearer public understanding such as only its own really well trained leaders could provide

It seems abundantly clear, then, that we are entitled to ask of the American assistance effort whether it sought to set in motion graduate training programs, and programs to develop the policy leadership of the profession. The answer is that it did, though not to the exclusion of other programs. Five of eight American domestic scientists were assigned to institutions that offered graduate work, or had early prospects of doing it. Of the four institutions helped, Lady Irwin and Women's Christian College were brought along very definitely toward graduate training capacity. The strands of the profession were brought together momentarily in the 1956 conference. True, the program did not move any university to the point where it would win the support of the University Grants Commission as a center to build up for eventual Ph.D. level training—it did not, in other words, take even the early deliberate steps toward making India basically self led at the scientific level of domestic science. But that is getting ahead of the job of the first assistance contract, the very purpose of which was partly exploratory. Concentration of effort on the critical needs would be a proper criterion by which to test the second phase of the contract program.

6 *Priorities in New Contracts* Consideration of the extension of both of these successful contracts began eighteen months before their expiration date. In 1958, the Tennessee contract had been executed and the new team had begun to arrive in India. A three year extension of the Ohio State contract had been proposed by the government of India and was being considered by the University. To what degree do these plans build on the strengths we have discovered in the old?

The proposed Ohio State extension called for furnishing India with experts in several fields of vocational education. The object would be to carry one step further the recommendations of the Secondary Education Commission by helping set up teacher training for the new vocational subjects in the "multiple-

"purpose" schools There was some feeling within the original Ohio State team that the time is not ripe for this phase

The parents, the teachers and the policy makers in the states of India do not know what these multiple purpose schools really are, and they don't feel any need for them There are very few educators in India who are committed yet to this goal that has been set up by the Secondary Education Commission A team sent over for this purpose might find the host institutions did not yet really want it

It requires a high level of educational policy judgment and intimate knowledge of India to weigh this kind of doubt If this assessment is an accurate one, some frustration on the part of the new team might still be judged a price worth paying for accelerating the pace of change

Meanwhile, late in 1958, after the first Ohio group had gone home, a decision was taken by the Ministry of Education which alters one feature of the earlier contract program The work of the All India Council, which had served as a progressive spear-head within the Indian teaching profession itself, was turned over to a directorate within the central Ministry of Education The Minister stated this had been done upon recommendation of a financial adviser to get stricter control over the expenditure of appropriations He stated that the former Council's work would receive vigorous support as a directorate in his ministry Mr S Natarajan felt his usefulness was ended One American who had been consulted at the creation of the Council in 1955 felt that a great opportunity had been lost to make the reconstruction of secondary education a responsibility of the teachers themselves The TCM officer negotiating the agreement for extending the secondary education contract was not apprised of the change at the time it was decided When he learned of it he did not regard it as a change critically affecting the opportunities of a new team in the secondary teacher training field

The new domestic science contract provides assistance for the creation of four regional centers to demonstrate home science

teacher training. Each center is in a college of home science. Strengthening that college will be the major job of the two technicians assigned to each center, something less than a quarter of their time will be available for consulting with schools and colleges in the region. This requires eight American home economists. The ninth, and party chief, will be stationed in Delhi as adviser to the Ministry of Education, which hitherto had no professional adviser in the field.

The objective of the regional demonstrations is 'teacher training at all levels.' At the post graduate level, however, the program cannot make a major contribution. This is because, of the four colleges which will become regional demonstration centers, only one, Lady Irwin in Delhi, has moved near the point of offering graduate work. Neither in western nor in southern India is the institution selected for assistance the one which has made the greatest progress toward developing post graduate work. Lady Irwin is the only one of the institutions strengthened in the first contract which is being assisted in the new one.

The reasons for the shift of emphasis in the new contract are substantial. So rapidly and widely growing is this field of education and so favorable the response to the first team of American home scientists, that twenty-four college level institutions asked for assistance. The regional programs extend all of them some slight help and advice. The need for adequately trained college teachers is acute. The new contract provides for twelve one year participant training openings plus four short time training openings in the United States. Admittedly this is far short of what is required. However, local conditions at two of the institutions in India now offering graduate work made them unwilling to accept a part in this assistance program. In the second place, the shortage of secondary school and extension teachers is as we have seen, as pressing as the shortage of college teachers. The public pressures for some manner of all India coverage made it difficult to concentrate help at one or two or three already strong institutions, especially when those institutions did not propose to train teachers for the mass needs. There were strictly administrative considerations within the

American and Indian government agencies that put a premium on the regional demonstration pattern Finally, the form in which domestic science had surely appealed to top policy makers in the Government of India was as a way of expanding educational opportunities for women Thus the Second Five Year Plan said nothing directly about home science It did stress heavily the need for more women's education in general, particularly at the secondary level, and the need of teachers therefor * Naturally when the Plan had been made, a program which most clearly fell within it had the greater chance of administrative and financial support

All these considerations explain why the Government of India might arrive at the regional demonstration idea Was it the best use to which the services of an American university team might be put? One kind of evidence needed to answer that question has simply not been collected That is a quantitative estimate of the number of teachers of domestic science needed in rural extension, in secondary schools, in colleges and for graduate teaching projected against the time required to develop training resources for each level Without that evidence (it is proposed to be collected under another project concurrently with the second Tennessee contract), we cannot say for sure what is the strategic level at which to tackle the teacher shortage Early in 1957, with the benefit of her previous survey trip and of the detailed information available through the University of Tennessee team in India, Dean Jessie W Harris made a three month visit to India She had with her Frances Zull, Dean of the school of home economics at Wisconsin Their report is the best place we can look for an authoritative opinion on strategy At three points, the report stresses the need for training more college teachers, concluding

To Summarize The greatest needs in Home Science in Indian institutions are for well trained staff members and for support in this field of Home Science from the State

* Government of India Planning Commission *Second Five Year Plan* (New Delhi Manager of Publications 1956), pp 504 and 510

and Central Ministries of Education The provision for an adequate number of participants in any future contract is the most effective solution for more college personnel in the immediate future The ultimate solution for India is to provide sufficient faculty personnel for post graduate training programs in India where future staff members may be trained

At the same time, the deans found the Indian Ministry of Education considering a plan for regional demonstrations of college programs of home science in Delhi, Bombay, Madras and Calcutta They saw certain opportunities in this to widen the impact and understanding of college domestic science After discussing the plan with Ministry and TCM officials, they expressed their hearty accord Post-graduate training within India is not mentioned in their recommendations

If the immediate recommendation does not seem to meet the need found to be greatest in the long run, the explanation may of course be that the deans felt an interim program directed toward showing the policy-makers of the various governments what home science is was a prerequisite for getting support for graduate work of the requisite level and quantity This is a point at which any outside surveyors would want to defer in their judgment to those on the ground

Anyone who has followed the professional work and the thinking of the first American team will watch with hope but a considerable feeling of suspense, while the second team helps set up a demonstration of the new profession at institutions which are also relatively new The suspense is because the American team will be isolated from the processes of self-criticism which ordinarily give a sure sense of direction to an academic discipline One of these processes is scientific research and the scrutiny of fellow scholars through professional publication, etc In the coming venture these processes will be going on in the United States, but hardly at all in India The other salutary corrective is continual and systematic contact with the needs of the people for scientific and professional help This will be available mainly through the extension service, which will be administra-

tively separated from the home science demonstration centers * The hope is justified by the professional competence and sensitivity to Indian conditions of the team members and those who are guiding their work

CONCLUSION

As we have interpreted it, there is an aspect of polarity, of opposing needs, in the Indian characterization of the desirable kinds of foreign assistance On the one hand, there is a tendency to rank consultants in a single order of eminence and intellectual authority, and to require people from the top ranks—people whose likes are not available in India On the other hand, there is a legitimate feeling that it is for Indians to decide on what must be done in India The land grant college contracts demonstrate, among other things, one way of resolving this polarity If the pattern of an American institution (in this case the land grant college) be taken by Indian authorities as the solution they need, then experience in that institution becomes its own criterion of professional competence, and a "firm" policy of adhering to the main features of that institution on the part of the foreign advisers is not inconsistent with Indian decision making power

The teacher training and home science contracts demonstrate a different resolution of the polarity Here are two fields where professional workers, like certain other specialists in our universities, have developed unusual skills in getting results requiring governmental decisions though they are even more than usually separated from the formal power to make decisions Professors of education have been accustomed to consulting with city or

* While the agricultural division of the TCM has been working for the integration of education with research and extension as its chief objective for the impact of the land grant colleges on Indian agricultural education the second home science contract, by one of those same land grant colleges, perhaps moves one step away from that objective by dropping a former concern with post graduate work

country school superintendents, or state directors of public instruction, of trying to reorient the work of teaching staffs, over whom they had not the slightest administrative authority, nor even the close administrative access to it that the department head in an agricultural college has to the state extension service. The women in domestic science have somewhat analogously won a sphere of respect for their competence from college presidents and state and federal agricultural administrators though they are considered outside the careers leading to top administrative jobs. Their own understanding of the situation in India led them to avoid the decision making roles, but their professional experience at home made it natural for them to feel confident that they could play a part in the reconstruction of their professional fields without such power, and equipped them with techniques by which to do it. In short, the role of technical assistance to an under-developed sector of the economy or an under-represented sector of the population, was (very broadly considered) what they had been doing all the time. This is one of the reasons for the exemplary relations of these two teams with their host institutions in India. It may even have helped each team to find so fundamental a concensus as each did upon its own role. This is one explanation of the parallel between these two teams in these respects, even though preliminary planning and agreements spelled out the role for one, and not for the other. They could leave power to the host institutions while remaining entirely true to the standards of their own professions.

But when it came to negotiating a new contract we see another side to this characteristic. The combination of professional competence with what might be called educational methods of effecting change were not enough. Leadership was needed not only on the Indian but as well on the American side which had a clear view of the general direction of change, and a strategic sense about how to advance in that direction. The present cases show a gap between the essentially developmental thinking of the teams and the essentially administrative considerations that went into the new contracts. Where the objective for which assistance is requested in developmental matters such as build-

ing new institutions or professions, reorienting old ones, and where the objective is distant enough to call for the contributions of several contracts, developmental thinking seems to be needed not only in the team itself, but in the executive staff of the contracting college. It is needed also in the government agencies which, because they remain on the job year after year, plan the major steps in the advance. Since these steps are decided under the impact of very broad policy considerations, like the desire to get more women educated, or to direct youth into productive vocations, the understandings of how the potentialities of the growing vocation or institution can best serve the nation need to be worked out throughout the governmental hierarchy, not excluding the ministerial level. On the American side, this calls for leaders who can visualize the potential contribution to India of agricultural colleges, or of domestic science, or of teacher training, but who are so thoroughly identified with Indian development that they are viewed by Indian policy makers as partners in that development. This may seem a resolution of the polarity in Indian needs at a level impractical of attainment. But Dr Frank Parker demonstrated such leadership in agriculture in TCM, Dean F Champion Ward demonstrated it in education in the Delhi office of the Ford Foundation.

country school superintendents, or state directors of public instruction, of trying to reorient the work of teaching staffs, over whom they had not the slightest administrative authority, nor even the close administrative access to it that the department head in an agricultural college has to the state extension service. The women in domestic science have somewhat analogously won a sphere of respect for their competence from college presidents and state and federal agricultural administrators though they are considered outside the careers leading to top administrative jobs. Their own understanding of the situation in India led them to avoid the decision making roles, but their professional experience at home made it natural for them to feel confident that they could play a part in the reconstruction of their professional fields without such power, and equipped them with techniques by which to do it. In short, the role of technical assistance to an under-developed sector of the economy or an under represented sector of the population, was (*very broadly considered*) what they had been doing all the time. This is one of the reasons for the exemplary relations of these two teams with their host institutions in India. It may even have helped each team to find so fundamental a concensus as each did upon its own role. This is one explanation of the parallel between these two teams in these respects, even though preliminary planning and agreements spelled out the role for one, and not for the other. They could leave power to the host institutions while remaining entirely true to the standards of their own professions.

But when it came to negotiating a new contract we see another side to this characteristic. The combination of professional competence with what might be called educational methods of effecting change were not enough. Leadership was needed not only on the Indian but as well on the American side which had a clear view of the general direction of change, and a strategic sense about how to advance in that direction. The present cases show a gap between the essentially developmental thinking of the teams and the essentially administrative considerations that went into the new contracts. Where the objective for which assistance is requested in developmental matters such as build-

ing new institutions or professions, reorienting old ones, and where the objective is distant enough to call for the contributions of several contracts, developmental thinking seems to be needed not only in the team itself, but in the executive staff of the contracting college. It is needed also in the government agencies which, because they remain on the job year after year, plan the major steps in the advance. Since these steps are decided under the impact of very broad policy considerations, like the desire to get more women educated, or to direct youth into productive vocations, the understandings of how the potentialities of the growing vocation or institution can best serve the nation need to be worked out throughout the governmental hierarchy, not excluding the ministerial level. On the American side, this calls for leaders who can visualize the potential contribution to India of agricultural colleges, or of domestic science, or of teacher training, but who are so thoroughly identified with Indian development that they are viewed by Indian policy makers as partners in that development. This may seem a resolution of the polarity in Indian needs at a level impractical of attainment. But Dr Frank Parker demonstrated such leadership in agriculture in TCM, Dean F. Champion Ward demonstrated it in education in the Delhi office of the Ford Foundation.

A First Lesson in Overseas Social Science Research

Up to this point we have been considering programs in which American colleges undertook to provide a service of some kind for India. We turn in this and the following chapter to an essentially different kind of venture—the work of colleges in gathering new knowledge in India. Both of our cases are taken from social sciences, for there have been many individual, but no organized university projects for research in the humanities or natural sciences within India.

Gaining new knowledge abroad appeals to American university faculty members as it is of direct value to them and to their universities. This is the first obvious difference from the service projects, which have in fact appealed to college people as an opportunity to contribute something to another country, or to their own nation's international relations. This direct interest means that these projects are themselves initiated by faculty members, they may present no recruitment problem at all. It also means that the support for such ventures comes from institutions dedicated to the increase of knowledge as a value in its own right—from the universities themselves or from foundations—rather than from the government.

From the host country standpoint, research projects, at least in the social sciences, may appear to offer some values to the development effort. But they also present a hazard which was minimal in the case of service projects. Social science research in any country may hold up to the nation's population a picture

of what is going on, of the character of the social order or traditions of the nation, which image will itself become a dynamic influence in the development of the nation. The influence may be favorable or unfavorable to development. The only thing one can say for certain is that the picture which emerges cannot be planned in advance. No one can be sure before the research is done just what will be the findings. And so social science research raises the question for planners of development whether an unplanned characterization of the problems of development is a good thing.

This is inherent in the nature of planned change and social science, and it is not a problem confined to India or to underdeveloped countries. A few years ago, for example, it became clear that the decision of the United States Supreme Court finding the segregation of children in public schools on account of race unconstitutional would challenge some of the bases of social order in the American South. A highly qualified group of social scientists proposed to make use of the well nigh perfect opportunity to find out how the various categories of loyalties, the various institutions, and the various processes of individual character formation relate to one another, as some are threatened, or turned against others. American philanthropic foundations declined to support the study. Among other reasons, they thought it was no time to raise the question in the South of the depth of attachment to the old order. Perhaps they were wrong in this reasoning. The point is merely that social science itself cannot assure a society what will be the consequences in history of its discoveries. A society has to be prepared to take a chance. When, in somewhat quieter times, the Carnegie Corporation brought a social scientist of top stature to explore the relation of the races in America from somewhat the same viewpoint, it deliberately selected him from outside the country, indeed, from outside any country which might have instilled racial prejudices into its people. The result was a profoundly new insight into the American situation, but also a release of energy for change. Dr Myrdal's book was cited by the Supreme Court in support of its decision. A society which can afford the risk may gain a wider

latitude to make its future. Probably the range of possible consequences is somewhat greater in the case where the social science research is done by foreigners.

In September 1948, Dr Morris Opler left his post at Harvard University to accept a professorship in anthropology at Cornell. The reason for this uncommon move was that at Cornell Dr Lauriston Sharp had launched a study of change in the villages of the new nations of south and southeast Asia. The Carnegie Corporation of New York had provided support, \$250,000 to \$300,000, for the study in four countries over the next five years. Dr Opler took charge of the India portion of the study. Within the past few years at Harvard, Dr Opler, who previously had published a great deal on the American Indians, had become interested in India. A R Radcliffe-Brown, the Oxford anthropologist, stimulated this interest during a year in which both he and Opler were at the University of Chicago. Another stimulus was a graduate student in one of Opler's Harvard classes, a man named Rudra Dutt Singh, who wrote a term paper on his native village and acted as informant to Professor Opler. Singh was on leave from his faculty post at the Balwant Rajput College, Agra, where he had taught geography and history. He decided to take up anthropology as his field of work. In 1947 Albert Mayer, the dynamic New York architect and planner, recruited Singh to go to Etawah in Uttar Pradesh to be the rural life analyst and evaluator for the village development project which soon became one of the prototypes for India's present village extension service.

Professor Opler's research in India began in 1949-50. He studied Aratal, a village near Allahabad, one of whose interesting features was that it supplied priests to officiate at the sacred confluence of the Jumna River with the Ganges below Allahabad which drew pilgrims from all over India. Indian cultural unity could be examined here, and the aftermath of Hindu-Muslim tension. Rudra Dutt Singh joined Opler at Aratal as helper and collaborator.

Some hundred miles north and east of Allahabad was Rudra

Dutt Singh's native village, Senapur. Enthusiastic for development after his creative work at Etawah, and for sociological and anthropological research in the process of change as a result of his work with Opler, Singh now proposed to make Senapur a center for a combined project of rural development and anthropological observation. The sponsorship in the village of a leading resident who himself thoroughly understood the value of research was a strong advantage to Cornell. In 1952 the first two of a series of able graduate students in cultural anthropology began field work in Senapur. The program was well prepared in such respects as language training. Cornell began teaching Hindi the previous year, Pennsylvania's resources of language training and newspaper files were drawn on too. Some of the field researchers got individual fellowships from the Social Science Research Council, the Fulbright program, or the Ford Foundation's Board on Overseas Training and Research. The Institute of International Education sent several Indian graduate students to Cornell, after training there they returned to India to do field research in Senapur.

So things stood when in April 1952 Professor Opler presented to the newly organized Ford Foundation in Pasadena a proposal for a more intensive and systematic study of an Indian village. This presentation led on to a meeting at Washington in June between Opler and the newly appointed Ford Foundation representative in India, Dr Douglas Ensminger. Ensminger had gone to India in November 1951, and had already given priority, among Foundation aims, to assisting the projected community development projects by supporting thirty village worker training centers. He had decided that the work of village development ought to be evaluated as it proceeded, and to him the evaluation should be in the broad context of cultural change. It seemed to him that the anthropology program at Cornell could make just this contribution. The Washington meeting therefore resulted in adding this new element of evaluation to the Cornell project. Unfortunately, however, the meeting lasted less than an hour, it is unlikely that either man got an understanding of the basic interests of the other. Never-

theless Opler was encouraged enough to draw up an outline of his proposal which he submitted to the Foundation in January 1953. It called for a grant of \$160,000 over three years. A nuclear group of four research scholars was to be sent to India by Cornell to make an interdisciplinary study of the processes of change in an Indian village. It was stipulated that the Cornell social anthropology staff was to direct the study, and that the Ford Foundation representative in India was to approve the choice of a village.

The proposed relation to Indian scholars and institutions was a point of significance later on. Opler proposed merely that the field staff would draw on library and laboratory facilities at the University of Lucknow. That institution was designated because Professor D N Majumdar, professor of anthropology at Lucknow, was at Cornell that year (1952-3) as a visiting professor of anthropology and had become a friend of the Oplers. He invited a tie with his institution. The proposal further said that Indian consultants would be drawn in from time to time, there was no other reference to Indian collaboration. Dr Ensminger, consulted about the scheme by the Foundation, advised that the training of Indian social scientists should have equal emphasis with American research. He proposed that four senior Indian scholars be counterparts to the Cornell field staff, and that Cornell come to India as a cooperator with the Lucknow anthropology department. Opler indicated a willingness to exchange faculty and students with Indian institutions, he definitely opposed joint direction of the study.

Dr Ensminger's thinking now reflected later developments in India. In October 1952 the government of India had launched the Community Projects throughout the country. From the start, the Planning Commission had set up a Program Evaluation Organization, surely a remarkable move for a nation engaged in an all-out development effort. Dr Ensminger had advised in this, and the Ford Foundation now assisted by supplying the consulting services of an agricultural economist and a social anthropologist from the United States. Thus, by the time Dr Opler's formal proposal reached him for comment, Dr Ens-

Enslinger had gone far beyond the point of their talk six months earlier, he was now deeply interested in a program of self-evaluation by a unit of social scientists within the Indian government. One result was his awareness of the shortage of Indian social scientists with field experience in the village studies.

In February a member of the Foundation's Delhi office wrote to the director of the Program Evaluation Organization in the Indian government asking for his comments on the Cornell proposal, but expressing the view that it should be a cooperative undertaking between Cornell and probably Lucknow. When the grant was actually made to Cornell by the Foundation in the United States on May 15, 1953, there was no such stipulation of joint direction. Opler's proposal on which the grant was made gave direction wholly to Cornell. Correspondence between Opler and Enslinger in the meantime had not mentioned joint direction or cooperation. Here was ground for misunderstanding not only between Cornell and the Foundation's India office, but between Cornell and the Indian Program Evaluation Organization.

Two changes urged by Dr. Enslinger had, however, been explicitly accepted by Dr. Opler. One was the increase of the number of senior men to be sent to India for field work, the other was the objective of field evaluation of the current Indian community project program. This was the definition of the project for which Opler was recruiting field staff during the spring of 1953 to begin work in India in August.

In July, after the award of the grant, and before Cornell personnel reached India, one of the Foundation's Delhi staff, assigned as consultant to the Program Evaluation Organization, went with the head of that Indian government agency to Lucknow to discuss the coming village study. They talked to the chairman of the department, Professor D. P. Mukherjee, and perhaps to others. As a result of these talks, they reached the decision between them that (1) there should be cooperative action in all phases of the project from planning to the publication of results, with the respective contribution of American and Indian participants defined in advance, (2) the support, perhaps

sponsorship, of the Indian Planning Commission was required, and (3) Cornell should ask the vice-chancellor of Lucknow University for formal cooperation. One may deduce that those responsible for a concerted national development effort, which would require unprecedented cooperation from India's people, had become concerned with the sort of picture of public response to that effort which might be held up in the early phases by foreign social scientists. But Dr Opler had not been consulted in the reaching of this understanding with an Indian government officer. Dr Ensminger, who was in New York at the time, was informed by cable of the results of the Lucknow talks. He talked to Dr Opler about them, Opler was upset. He agreed orally to the closest collaboration with the University of Lucknow, but since there was no written definition of what that meant, it is possible that here again, he had an understanding quite different from those of the Indian nationals with whom he would work.

Several Cornell field research workers reached Delhi in 1953, eager to go out to the village. They had to wait in a Delhi hotel while an understanding was reached about the direction of their project. Dr Opler arrived on October 11. He had asked for an early meeting with the head of the Program Evaluation Organization, and this was held on his arrival. In the meantime as we shall see, the Planning Commission itself had decided, as a matter of policy, that social science studies by outside experts should in cases like the present one, be made in close collaboration with one or more Indian universities or institutions. In any event, when Opler met the head of the Program Evaluation Organization, there very soon came out a direct disagreement as to whether, in sponsoring the project, the Ford Foundation had stipulated "the fullest participation of Lucknow University" in the work. The Indian officer, from his discussions with the Foundation's Delhi personnel, of course thought that it had. Opler was equally clear that the grant had been made on the stipulation that it would be directed by Cornell. Even the "closest collaboration" he had agreed to orally did not necessarily upset that clear provision of his proposal on which the funds had been granted. One who follows the record can only

conclude that they were both right. But partly because each was so certain of the rightness of his position, very high feelings were aroused

With a field research staff biding its time in Delhi, and confronted with a firm position on the part of the government agency in charge, Dr Opler had no choice but to try to make an agreement with the University of Lucknow. He and Professor Majumdar drew up such an agreement on November 16. It said that they should together plan further details of the project and direct their implementation. Professor Majumdar undertook to provide office space for the records of the field workers, Professor Opler agreed to consider Lucknow graduate students as field workers in spite of some lack of field experience. The Cornell project in India had become the Cornell-Lucknow project.

Meanwhile, the Program Evaluation Organization had selected Ranakhandi, a village included in one of the first community development blocks, as the site of the Cornell-Lucknow research. This choice was accepted by Opler, but only after he had made a proposal which the Planning Commission regarded as completely impractical that a community project block be instituted at Senapur so the evaluation could go forward at the site of Cornell's previous work.

On November 21, the first of the field workers got out to Ranakhandi. Dr Opler assigned each one of them a caste population within the village. Of this population they got very exhaustive information paralleling that on other castes. The field work went ahead smoothly. At the end of March 1954, Professors Opler and Majumdar were able to present a seminar at Lucknow, discussing in the presence of eminent scholars and officers of the Planning Commission and Program Evaluation Organization the methods of research and early findings at Ranakhandi. It was well received. Dr Opler appointed not Dr Majumdar, but another eminent Indian anthropologist as senior investigator at Ranakhandi.

From that time on, relationships tragically deteriorated. Dr Opler learned that his wife had cancer, he had to take her home

where she later died His successor in charge of Cornell's work was Dr Merrill Goodall, who had been in India 1951-53 on a Fulbright grant making studies in public administration. That Goodall was a political scientist disturbed the Program Evaluation Organization, which had regarded the project as confined to anthropology Professor Majumdar, who had been willing to work in only a nominal relation of equality with a man he regarded as an outstanding anthropologist, had no such feeling about any of the Cornell successors The head of the Program Evaluation Organization began to realize that this project was not going to yield what he had counted on in the way of techniques of evaluating community project work in villages on a large scale Those responsible on the Indian side did not wish to call for the liquidation of the project But they felt its continuation was a burden they had to bear

At this stage the project was attacked in a Lucknow newspaper, a daily published in Hindi, *Swatantra Bharat* One explanation is that pro-communist politicians wished to arouse suspicions against an American sponsored activity Another is that campus politics (there was a student strike at Lucknow about this time) made use of this potentially emotional issue In any event, there was no effective reply Professor Opler, being out of the country, was completely upset There was another round of derogatory stories in the English daily *National Herald* the following year, the specific subject being the research questions of a young American scholar who, though supported by other funds, had been drawn into the work of the project at Dr Opler's suggestion Clearly the project was regarded as politically vulnerable by some opinion leaders in Lucknow

It is time to view these developments from Professor Majumdar's perspective He was, of course, pleased at his appointment as visiting professor at Cornell 1952-53, an appointment which was partly arranged through the Fulbright foundation He coached some of the prospective Cornell researchers in India on what they would find there He recalls Dr Opler saying to him, "Let's work out this Cornell Lucknow scheme together" As plans developed, however, he was passive about Lucknow University having an institutional responsibility for the project.

He wanted support to do field research and give his own graduate students field experience This Dr. Opler agreed to provide in the form of \$12,000 from Cornell's grant Professor Majumdar used it to launch a study in a village, Gohana, near Lucknow Because of this independent interest, and because of his complete confidence in Dr Opler, Dr Majumdar did not as long as Opler was in India make any issue of the power of codirection

What Dr Majumdar regarded as intolerable was that, after Dr Opler went home, the Cornell-Lucknow project office at Lucknow seemed to be out of his control Dr Opler left Mr Rudra Dutt Singh in charge and answerable to him Since Dr Opler was in the United States, immediate issues came up on which Rudra Dutt Singh believed he was acting as Dr Opler would want, while to Dr Majumdar, office personnel in his own department were defying his authority He wrote a detailed letter of protest to Singh, which also descended as an unsolved controversy on the Ford Foundation in Delhi

With Dr Goodall, Dr Majumdar had very pleasant relations He made him visiting professor, and Goodall later served in the public administration institute at Lucknow University Good all was succeeded in direction of the Cornell work in India by Dr Edward LeClaire who seemed to Dr Majumdar once more to let the office clerk in Lucknow become insubordinate to him

Reflecting on the experience in 1958, Dr Majumdar did not question Dr Opler's personal role in the project, nor criticize him as a man or as a scholar "Dr Opler wasn't here," he said, "that was the trouble"

RESULTS

From the standpoint of international relations, the Cornell-Lucknow project must be counted, in its own limited sphere, a failure An American university venture had been found a suitable target for a limited but bitter attack in a section of the press and by one or two legislators It was not defended by any government or university authority The feeling stirred up in Lucknow was sufficiently forbidding so that the United States

Educational Foundation director felt that it would not be advisable for an American scholar to work at Lucknow in the following year. The situation reached the Prime Minister in an unfortunate form when a critical letter by one professor to an individual in India was passed on to him, a letter which seemed to insult the Indian national.

The controversies engendered burdened the desks of the foundation, university, and government administrators with some unpleasant and difficult problems. These naturally made them a good deal more skeptical than they might otherwise have been of other contemporary and future social science research ventures between nations. The most significant illustration of this point is a set of criteria for the approval of foreign sponsored research adopted by the Planning Commission in July 1953, just at the time of the greatest gap between the plans of Dr Opler to direct a field study in India and the plans of the Indian authorities to get Cornell to enter a joint project to evaluate rural development and train Indian researchers. We shall examine the criteria in the next chapter.

To Lucknow University and Dr Majumdar the consequences of the venture were unpleasant, but not unfavorable. Dr Majumdar got support for his study of Gohana, which he pushed through to completion. The Indian government gave him a grant of Rs 20 000 to carry on the second Lucknow village study in Dudhi. The most likely conclusion is that all-round analysis of village life had been accepted by those who supported academic research in India partly because of, not in spite of, the Cornell-Lucknow venture.

In the village of Ranakhandi, the flurry of hard feelings entered not at all. There was no reluctance of the people to talk to the American or Indian researchers. The Americans were well accepted by the local authorities. There was a touchingly warm reaction of the village when John Hitchcock of the Cornell team helped get medical attention for a party of village children who suffered a motor accident. "We again thank John Hitchcock and his associates," wrote the village headman, "and pray to God that the world be full of such people."

The Program Evaluation Organization did not get what it

wanted—ways of testing village reactions to development efforts which could be applied to hundreds of villages in the nationwide evaluation Looking back, one is dubious whether an intensive study of one village conducted under anthropological leadership could conceivably yield that result It might have yielded other results more immediately useful to the community development effort than the Cornell project did In any event, it is perfectly clear that Professor Opler was not working toward an applied goal of this character Both the Ford Foundation and the Indian government had a right to feel that he had agreed to, and to be dissatisfied when he did not Whether the Cornell work will yield knowledge of Indian culture which will in the end make an even more profound contribution to development plans is another question, certainly no answer is possible until the comprehensive publications now pending can be read and reviewed Already Dr S C Dube, in *India's Changing Villages* has given a sharp picture of the villages, and of the blockage within the government administrative channels of the flow of village initiatives upward and of technical knowledge down wards This is a direct product of the Cornell India Program *

Toward the two objectives which Dr Opler originally set for himself, gaining new knowledge of cultural change in the Indian village, and training graduate students in this process, the project was, in spite of the controversy around it, certainly a success One cannot yet fairly assess the new knowledge gained In the department of anthropology at Cornell is a room full of file cabinets, carefully classified, of the field notes of the study The synthesis and contribution to theory of this knowledge can only be judged when the books of Professor Opler have come out But if the study had done no more than give us the articles of Dr John Gumperz on language in rural North India, or the articles of Dr Opler and his students on the ties between the village and the outer world, or the thinking of Dr Baij Nath Singh and the publications of Dr Dube on what the village worker actually does day by day, it would have been

* S C Dube *India's Changing Villages* (London The International Library of Sociology and Social Reconstruction, Routledge and Kegan Paul, Ltd., 1958)

worth the investment of the foundation grant All of the growing band of American faculty who teach on India to undergraduates are grateful to the project for Mrs John Hitchcock's creation of a documentary film of insight and artistic excellence, "North Indian Village "

By going to India in this project at least seven first-rate young cultural anthropologists have done field research for their Ph D degrees at Cornell No doubt they would have got field training elsewhere had this opportunity not been available, though anthropological problems are getting scarce But the stimulus of parallel projects in related fields, of field supervision, of work alongside researchers from the host country—all these factors drew very able young people to the project and gave them a favorable situation for professional work In addition to the anthropologists, at least one political scientist and one agricultural economist gained a similar experience in Ranakhandi These were Americans But at the same time, fifteen Indians were trained at Cornell, three found a chance to do research and writing there in connection with this project Of these, at least three earned the Ph D degree Certainly the training these men got was far more valuable to them because it dealt with the actual situations of their own country

Perhaps, when one counts the result even of a sizeable international project of this kind, one should not overlook the cost to the particular men and women involved I believe no one who knows the individuals who had to take responsibility for this venture would want it repeated, no matter what the professional values, because the scars it left are deep

Conclusions

Nothing is to be gained, in trying to learn the lessons of this experience, in shutting one's eyes to the fact that those who dealt with this project on the part of the foundation and the government believe it failed, and believe it failed because its director, however fine a scientist, could not organize human

relations Against this view must be set the fact, which is not disputed, that Professor Opler carried out his researches in Arial, and continued them in Senapur on a scale involving field work by several Indians and Americans, with entirely smooth personal relationships These points are not necessarily inconsistent

What is not generally asked about this project is whether any university department head could have worked effectively in the relationships created in India for the Cornell project It is a very necessary question Can any American professor be expected to lead a complex piece of creative research if his leadership must be shared with another after the research has been planned, and without his free consent? As soon as this question is asked, we can see that it is at least possible that much of the tension originated in a simple lack of understanding between the director of the project and its Indian sponsors Dr Ensminger quite rightly believed that *Dr Opler chose to work with Dr Majumdar*, that relations between them had become close by 1953 But Dr Opler no doubt assumed all along that such a relation would not involve his sharing intellectual direction of the research, the evidence even now is that Dr Majumdar did not want that He was content to have Dr Opler at the helm If these suppositions be correct, then the one contingency which was certain to make the respective individual roles insupportable by the persons involved was to require that the roles be formalized in a process on which the prestige of universities and of governments was staked One wonders, for example, what might have happened to the project if, having learned that the Program Evaluation Organization desired the formal collaboration of an Indian host university, the foundation had simply reported that fact in the spring of 1953 and had suggested to Dr Opler that the grant could be made if he could himself work out with an Indian institution some mutually satisfactory collaboration

The disappointment of the Program Evaluation Organization which wanted applied research yielding techniques of evaluation, was more clearly due to the American university not delivering what the grant called for And yet even here there was unneces

sary misunderstanding Longer talks with Dr Opler in 1952, when he was beginning to work upon his proposal, and visits to his department, might have made clear whether he was interested in applied anthropology or the knowledge of culture change as such The fruitfulness of applied anthropology is much discussed within the profession Assuming that he was found to be interested in the scholarly problem of explaining the process of culture change in a village, it is still not impossible that the rather farsighted and intellectually sophisticated people on the Planning Commission would have attached value to this approach They showed great interest in a purely analytical study of factions in a village done by another American anthropologist about the same time

No one who tries to assess a difficult experience with the benefit of hindsight, no one especially who has been made the beneficiary of personal information precisely because he is known to have no power to influence events in a past case, can judge the decisions then taken, on different information and different experience, to be right or wrong The main fact to be remembered about the Cornell case is that almost every participant in it was doing what he did for the first time No American university had done organized research in India before, the Ford Foundation had just been created, the Indian government had never tried to get its work evaluated by social science before (no government had done much of that), Lucknow had had no international collaboration The likelihood is that most of the steps in this case which look like mistakes now would naturally be avoided on the basis of the present experience of the parties to this case It is mainly because other newcomers might stumble into them that they are worth writing down and explaining, if we can now

A Promising Social Research Program

Early in 1953, Massachusetts Institute of Technology's Center for International Studies was exploring the possibilities of research in India on the broad subject of economic and political development. That one of the world's leading institutes of science and technology should be undertaking such a project may call for brief explanation.

MIT had, in fact, begun social science research recently and as the combined result of a number of different interests. Shortly after World War II, for instance, the United States Government had asked MIT to try to suggest answers to Soviet radio jamming of American propaganda broadcasts overseas. It was a technological problem, but the imaginative scientists at MIT became interested in who listened to United States broadcasts, and why. They called in a few social scientists to get answers. A broader reason for interest was the growing conviction at MIT that learning in science and engineering needed to be complemented by knowledge of the political, social and economic aspects of technological change. Oriented strongly toward research, the MIT administration sought in the social sciences new knowledge gained by new methods of enquiry. Clearly, America's new role in international affairs offered the most rapidly advancing frontier of policy and, hopefully, systematic understanding. From the start, it was "the problems posed by the interaction of the developing societies in the world community" that offered the greatest promise for the discovery of

explanations for the complex and seemingly untoward developments in America's international relations

The development of the new nations, approached in economic, sociological, social psychological, and political terms, was the central subject of interest of the Center for International Studies when MIT set it up under Dr Max Millikan's leadership in 1951. The Center, an organization with its own budget and staff, operated largely on broad research contracts. It offered no courses or degrees, but through seminars and supervised graduate research work gave advanced training to a small number of American and foreign specialists. Mainly by loaning members of its research staff to the MIT teaching departments, and borrowing faculty from them, the Center contributed to broadening the instruction MIT offered. It had as one of its major aims the provision of suggestions and of knowledge having a practical bearing on problems of American policy to the men and women engaged in making policy decisions.

In 1952-53, the Center got an exploratory grant to plan a comparative study of the economic and political aspects of development in three countries exhibiting a considerable range of situations and prospects. Italy, India and Indonesia. Millikan had already been in correspondence with the Planning Commission staff at a time when the subject of capital formation was of utmost importance.

Dr Wilfred Malenbaum, visiting professor of economics at the Center, was later to take charge of the Indian project. In 1952-3, he took occasion, after attending a Colombo Plan meeting in Karachi as an United States observer, to go on to Delhi, where he discussed MIT's interest in research with the Finance Minister and officers of the Planning Commission. He encountered a general interest, but was unable to get agreement upon specific relationships or research projects. In March 1953 the Center proposed to the Ford Foundation a very broad study of development in India, going beyond economics, for example, into the role of various population segments in the process of development. This was to be a part of the Italy, India, Indonesia study. The Foundation was not yet ready to decide on this

proposal, partly because its representative in India had under consideration with the Indian government a more comprehensive scheme to support a Social Science Research Center in India (which did not, as it turned out, materialize), and partly because he advised against making any grant for organized research in India unless its scope and content were agreeable to the duly constituted authorities of the Indian government

The Center decided to send a few individual researchers to India to explore the availability of information and to demonstrate the use that could be made of it. To illustrate, Dr George B Baldwin went to Bangalore and Madras, where he gathered much case material on the hitherto unexplored subject of the manner in which Indian businesses originate and get their initial capital

A little later, Dr Millikan came out to India to try to get a specific understanding with the Government which would pave the way for an organized and extended project by the Center in India. When he reached Delhi in September 1953 he met with the Planning Commission itself. Thereupon he made a hasty visit to each of the leading centers of economic research in India, came back to Delhi and had a further meeting with the Research Programs Committee. This organization, a committee attached to the Planning Commission, had recently been created to stimulate research by universities and institutes on subjects which could guide the national development effort. It advised the Planning Commission on the award of grants to support such research. As we have seen, in connection with the Cornell anthropology project, the Planning Commission had just resolved that organized foreign social science research in India should be carried on only through certain prescribed forms of collaboration with Indian institutions. The Research Programs Committee was the designated agency to carry out this policy. At its first meeting in August 1953, the Research Programs Committee had already selected three areas of priority in research effort.

Millikan's meeting with the RPC took the form of discussing which of the Center for International Studies' possible specific

research subjects fit these priorities. It was agreed after some further negotiation that these four did

- (1) volume, composition and consequences for output of capital formation in a recent year
- (2) the effect of changes in the agricultural sector on other sectors of the economy
- (3) alternative combinations of labor and capital technologically possible in large and small scale industry
- (4) management and business organization as factors in the efficiency of investment.

Agreement on these topics did not, however, lead on to agreement on specific means of collaborating in research. Dr J J Anjaria, economic adviser to the Planning Commission, proposed informal reciprocal help, suggesting that the Center for International Studies go forward with research on these topics while the structure grew up.

One reason no doubt was that the Indian government was still making its policy as to the conditions under which foreign sponsored research might fit into a planned economic and social development. In August 1954 Anjaria wrote Millikan quoting "the Planning Commission's approach to all proposals for research sponsored by scholars or institutions from abroad." The policy statement is of such general bearing as to be quoted almost in full:

- (1) proposals should be in subject areas 'in which the foreign sponsor has a special contribution to make in view of its experience or expert knowledge,'
- (2) 'actual work' should be planned 'in consultation with a person selected from one of the Indian universities or research institutions on advice of the Research Programmes Committee. For collection of data from the general public the Indian professor in charge would make the necessary arrangements.'
- (3) 'It should be clearly understood that none of these projects is sponsored officially by the Planning Commission or any Government agency such research

projects "have access only to such information as would be made available to any university or research agency in India,"

(4) Whatever expenditure is necessary in India for carrying out field work or any other work connected with the project approved by the Research Programmes Committee should be found from the funds available to the RPC. The foreign agency's cooperation should be in the form of expert advice and assistance in planning the investigation or in interpreting their results"

Aside from the specific experiences which lay behind this policy, including the Cornell anthropology project, it expressed at least two not entirely consistent desires or interests. Some individual Indian researchers and faculty members on and off the Research Programs Committee thought the first proviso should mean that foreign researchers should not undertake schemes in India unless they possessed skills not to be found in India. Members of the Planning Commission, on the other hand, interpreted "a special contribution" as meaning merely a satisfactory degree of professional attainment and specialization to do the work. The Planning Commission's concern is well put in a statement the Secretary of the Research Programs Committee made a year later "The research personnel in India for socio-economic studies is somewhat limited. If this limited talent is to be utilized to the best advantage, a schedule of priorities in the light of India's needs has to be established"**

Without undertaking to argue the merits of this policy, one might maintain that far from being a fixed quantity, India's potential of research workers in the social sciences is considerably expandable, partly by the utilization of trained younger men and women who have not become nationally known and recognized as advisors by governments, partly by providing opportunities for field research experience to people of good

* In a communication to the *South Asia Studies Newsletter*, No 4, June July 1955 (published at the Institute of East Asiatic Studies, University of California Berkeley)

theoretical training who have not had time or support to do research themselves Foreign sponsored projects might be thought of as expanding the potential as well as competing for it

The concept of a relatively fixed supply of research manpower, and of the desirability of setting priorities for its use was firmly held by the Ford Foundation representative in India He therefore consistently maintained that the priority-setting function of the Indian government should be accepted by foundation-supported research in India, even before the Planning Commission had formally taken on this function It is very important to note, however, that in the MIT case it was the research institution and not the Foundation staff that entered negotiations with the Planning Commission representatives as to the research subjects which should have priority, or the working relations with Indian institutions This was a strong advantage of MIT compared to Cornell

Dr Ensminger's position and MIT's seemed to him to be upset when he learned indirectly in July 1953 that the Center for International Studies proposed to carry on another piece of research in India on which neither he nor the Planning Commission had yet been consulted This was to be part of a broad study of communication with regard to international relations directed by Dr Ithiel de Sola Pool. While it was supported by Ford Foundation funds, the grant had been made in 1952 without special reference to India, and it was going ahead within the Center with the normal degree of academic independence But it seemed to Dr Ensminger that the subject proposed to be studied including the images Indians had of the United States, and how they got them, might easily lead to public resentment. If there were criticism of the study in India, it would almost certainly become criticism of the Ford Foundation program in India. Potential critics could not be expected to grasp the fine distinction between the Foundation's well known program in India and its world wide support of learning for learning's sake In any event the international communication study certainly had not been approved under the newly prescribed policy of the Research Programs Committee

Dr Millikan urged that Dr Pool be allowed, nonetheless, to find out whether there would be objection to his project in India. Pool came out in March 1954. The method by which he proposed to get research done in India was well suited to minimize criticism. He simply discovered a number of Indian social scientists who were themselves interested in doing research related to the question of international communications, and offered them small grants to carry their researches forward and submit results to MIT. Next year, and oddly enough partly because Pool's subject was so unconnected with the economic development studies with which the Planning Commission was primarily concerned, Millikan received word from the Research Programs Committee that it need not fit into the RPC priorities, but could be handled differently. Adroit handling of even so sensitive a study by the Center for International Studies denied to potential critics, if there were any, occasion for public attack.

Meanwhile, the Center for International Studies had retained Dr Wilfred Malenbaum to direct its India work on the process of development. He visited India late in 1954, and early in 1955, recast the four agreed subjects for economic research into two more specific research proposals: (1) studies of the growth of individual industries over the past ten years or so to find out what factors were responsible, including changes in the proportion of capital to labor input, and effects of growth on output and employment, and (2) investigation of the impact of changes in the rural sector of the economy on the whole, making use of such existing data as would permit villages to be observed over ten or fifteen year intervals. Such research required access to data from such sources as the Reserve Bank, the Registrar of Joint Stock Companies, or the Punjab Board of Economic Enquiry. This as well as the stipulated policy of the Research Programs Committee required official approval of the specific research proposals by that Committee. After much preliminary correspondence toward that end, Malenbaum came back to India in September 1955 to get agreement on specific institutions which might serve as hosts for the proposed MIT research staff.

for access to data, for Indian collaboration in directing and staffing the study He was encouraged by his individual interviews with economists and with the members of the Planning Commission and the RPC staff But when the subcommittee on foreign sponsored research of the Research Programs Committee met on November 8, 1955 to consider MIT's proposal, they took no decision, referring the question back to the parent committee which was to meet next month By this time three additional American economists had reached India Malenbaum was deeply discouraged about getting official approval for host institutions for them It was fourteen months since the RPC had given general approval to MIT's areas of proposed research

Malenbaum therefore proposed to Anjaria, and the latter agreed in substance, that MIT proceed for the time being to carry forward its proposed researches making such particular ties with Indian institutions as might be agreed to informally, institution to institution The formal approval of a joint project and the collaboration of Indian and American economists in planning and conducting it could await the results of this experience, or grow out of it Except for the naming by the RPC of three of the institutions at which they worked during the year, the MIT staff thus found their formal position precisely where it had been fifteen months before, when Dr Millikan went home from India Their informal gains in knowledge of the Indian government's needs and of economic work in India were considerable The RPC procedure had, however, not really functioned at all in their case

At the end of the year, September 1, 1956, the six MIT staff members had worked at eight Indian research institutes in Bombay, Ahmedabad, Poona, Delhi, Ludhiana, Shantiniketan, and Calcutta Malenbaum reported

The lack of any formal connections with specific "opposite number" research groups permitted a degree of flexibility which I believe essential for a group of foreign scholars who wish to make use of the data available in this country We were able to shift the locale and indeed the specific work outlines for our programs

as necessary. Nor did this flexibility interfere in any way with the rapid establishment of a prolonged work relationship (as in Calcutta) where the information available was more in line with expectations *

It was a productive year. The six economists wrote thirty-three research papers on the spot, more grew out of the field work later. For instance, Dr Walter C Neale was able to state certain basic questions about the validity of the data hitherto collected in surveys of village economics to measure changes in productivity. Dr George Rosen produced reports on capital coefficients in the cement, iron and steel, paper and textiles industries. In December 1955, Dr Malenbaum himself wrote a long note of comment on the first draft economic outline of the Second Five Year Plan. This was at the suggestion of the Deputy Secretary of the Planning Commission, Mr Tarlok Singh, who circulated the note to the top economic advisers of the various ministries of the Indian government. Malenbaum's comments which suggested alternative economic concepts to deal with certain of India's development processes were thoroughly discussed by these men. Professor Charles Myers, not of the Center staff, but director of the MIT Industrial Relations Section, spent 1955-56 in India studying labor management relations. His first resulting publication, "Labor Problems of Rationalization, the Experience of India," was read with great interest and circulated by the top officers of the Ministry of Labor.

When the Center sized up this experience late in 1956 these five conclusions emerged concerning the future of MIT work in India:

- (1) India was highly important to any study of the process of development
- (2) The task of setting up relations in India was complicated, a program should last three years or more to justify it

* Center for International Studies *Progress of Work in India Sept 1, 1955 Aug 31, 1956* (Cambridge, Mass 1956, hectographed)

- (3) The non-Indians in India should number three to four at any one time, with some rotation. This would give time for recruitment of the later appointees, 18 months being needed
- (4) The team to work in India should be a mixed one, having social scientists other than economists, and having some non Americans on it
- (5) MIT should not invoke the formal procedure for joint research sponsored from abroad"

At the same time, Dr Ensminger raised the question with key individuals on the Planning Commission and three leading economists whether MIT should be brought back on a more organized basis. He found keen interest. In April 1957 Dr Millikan came back to India to negotiate a second project. This time instead of seeking an official meeting of the Research Programs Committee, Dr Ensminger arranged a meeting of an ad hoc group, those to whom he had already talked individually in the Planning Commission and among leading economists. Out of this meeting grew a second smaller one in May. In the history of Indian social science leadership it was an important event. Of the perhaps five or six leading Indian economists outside government four constituted themselves a standing co-ordinating committee to cooperate with MIT on a four year program of joint economic research. They did not accept the idea of involving other social sciences in the project. Otherwise, they drew up a program meeting Millikan's criteria. Each of the four heads a major economics research institution. Each agreed his institute would cooperate and provide a counterpart. The coordinating committee itself undertook to get whatever clearance might be necessary from the Research Programs Committee. It is difficult to imagine more favorable auspices for an organized social science research project in India.

On the strength of this agreement, and with the hearty endorsement of Dr Ensminger, MIT straight away received a four year grant of \$750 000 from the Ford Foundation. In the middle of 1958 the Center sent out in advance its administrative officer to arrange office space, housing, customs and tax status,

and other details for the team of economists In the fall, the initial group of three economists began work in India They were Dr George Rosen of the Center's staff, Professor Trevor Swan of Australia National University, Professor I M D Little of Nuffield College, Oxford

As before, these men did not find Indian sponsorship such as to engage in joint planning of their specific research projects Indeed, the coordinating committee had not met, since its formation in May, when the MIT economists arrived But in pursuing their own research interests they had helpful advice, wide latitude, and excellent access to data No practical question had arisen, by November 1958, regarding Research Programs Committee clearance

CONCLUSIONS

MIT centered its India project in the field of social science which is most highly developed in India, economics It is very hard for an American to appreciate how far ahead Indian economics is of Indian sociology, or anthropology, or social psychology or political science There has probably been more research and publication of adequate standard in economics than in all other social sciences put together It is in the economic journals—*The Economic Weekly* of Bombay, *The Eastern Economist* of Delhi—that much of the social science of the livelier kind is published Mr Eric Da Costa, editor of *The Eastern Economist* conducts the Indian public opinion poll While economics and statistics are the two academic fields from which the government of India regularly draws respected advisers There is no counterpart in any other discipline to Dr J J Anjaria, economic adviser to the Planning Commission, or to Professor P C Mahalanobis, statistical adviser to the cabinet Of course, the thinking which goes into the five year plans is largely economic thinking That is recognized in the Planning Commission's Panel of Economists, the only body permanently constituted to criticize the draft plans from a strictly

intellectual angle But there are also in the Reserve Bank and in the Finance Ministry as well highly qualified groups of economists The gap between the elite group in the higher civil service—men chosen on graduation from college for their general intellectual brilliance—and the lesser elite in the universities—men further removed from power and money and sometimes denied the rewards of time and peace to do creative work which might compensate—is more nearly bridged by economists than any other group High prestige had its consequences within the profession, too Able graduates went into economics Economists, used to dealing with business directors and government department heads are men of sophistication and self-confidence All in all, MIT could not have proposed to work in India in a more promising field

We can see the consequences of the uniquely high status of economics in at least two directions It opened to the Center the most favorable prospects for government approval, and for the discovery of scholars in Indian universities and research institutes with whom to collaborate From the viewpoint of the present study, therefore, the MIT case permits us to test the workability of international joint research sponsorship under present Indian procedures under the most favorable circumstances

The second consequence of the uniquely high status of economics was somewhat disappointing The Center for International Studies had hoped to study changes in India through social sciences, not merely economics Dr Ensminger was strongly of the same view But while collaboration could be worked out for economic studies, it proved impossible to define broader social questions for interdisciplinary research to which joint international sponsorship could be found.

The ideal basis for an international program is, of course, the discovery of an activity that is of direct benefit to all the parties concerned In the case of Technical Cooperation Mission contracts, the benefit to India and to Indian institutions is also a benefit to the United States, ultimately in terms of world peace The benefit to the American colleges is indirect, they participate as a service The village study offered direct benefits to Cornell

The foundation and the host government also desired certain benefits from the project for India, but as it turned out these were not benefits of the project which Dr Opler had in mind, to him they were extraneous. The fact that social analysis first hand in the pilot Etawah scheme had served to guide development made it easy for government officers and perhaps even some of the social scientists to think that a study in one village could somehow provide such guidance to a national program. The very novelty of the study worked against a sophisticated caution.

The key difference in the MIT case was not that the Planning Commission and the Center for International Studies wanted much the same knowledge, though they did. The key difference was that the knowledge the Planning Commission wanted could be got by the theoretical formulations and the types of data that the Center proposed to employ. This was partly because development economics formulated problems in which particular economic policies showed up relatively precisely as variables, and because economic data (though by no means complete or entirely valid in India) could be expected to show on the national scale what the effects of these variables might be. The discipline itself was quite different from cultural anthropology in these respects. Meanwhile the Indian planners had already, by the end of the First Plan, experienced the limits of existing economic concepts and statistics so that they sensed the need for some basic re-examination on both fronts. So while Millikan was at least as interested in basic explanatory theory as Opler was, the Planning Commission was in no way disappointed that the Center worked in that direction.

In other ways, too, the attractiveness of the project to all those who took part made itself evident. One way was the quality of personnel the Center was able to recruit. Another was the quality of Ph.D. and post-doctoral research in India for which the Center could provide intellectual guidance, access to data, and publication. The direct interest of the Indian hosts showed clearly in the willingness of four of the top group of Indian economists to cosponsor the continuation of the MIT program.

One feature of the MIT program which gave it added value from the viewpoint of Indian planners and which added to its economic merit was its international comparative approach. The fact that the Center was simultaneously studying developments in Italy and Indonesia made it easier to explain why the Center could not undertake applied studies on India's immediate problems. It set aside from the start the possible thought that the American scholars might be looking at India's economy through the blinders of a particular national history. This may be one reason, along with the stature of the Center's staff, which induced the joint sponsorship of a group of Indian economists of such heterogeneous views. All this is aside from the question whether the study could in the end arrive at explanations of economic development reaching across the diverse situations, and the disparate economic data, of the three countries studied.

The MIT venture was directed with the utmost strategic skill. This showed in a number of ways. Without it, the study in international communications might very well have become the focus of just such public criticism as bedevilled the Cornell project. The Center, moreover, skillfully avoided involvement in any of the potential tensions between host institutions or professors, or with the foundation, which overwhelmed the Cornell people.

Incidentally, though all these factors were favorable, the fact remains that the sincere attempt of the government of India, the Ford Foundation and MIT to get international collaboration in creative research sanctioned by a government committee simply failed to function. The present distinguished committee of sponsors was set up in talks of groups of individuals, some of them key officers of the Planning Commission and the Research Programs Committee, not officially by the RPC. Everyone concerned tried to work the formal machinery, but had quietly to turn to informal channels in the end. This case suggests two reasons. Group research of a basic or creative kind requires that the participants select themselves, in the sense that the group project must appear to the senior collaborators as of vital professional interest to them. Such intellectual com-

munion is where you find it, it would be almost impossible for a government committee, even a committee of scholars in various fields, to predict where such collaboration may emerge The Research Programs Committee, however, had another disadvantage in trying to guide a foreign research institute to the proper collaborators The official committee had to think of the general academic standing of the institutions in the country The result was that the men whose institutions were nominated to work with the foreign researchers were inclined to be the men already most over-burdened The result could be worsening research bottlenecks in the attempt to avoid them

The Research Programs Committee gave MIT representatives valuable advice on the general question of the need for various kinds of studies Getting into the detailed approval of research designs, however, it had necessarily to feel its way so slowly that in fact the occasion for decision passed it by The Center for International Studies was intent upon achieving genuine cooperation with Indian research scholars and institutions in designing research, gathering data, and interpreting it One wonders whether that might have been achieved had Indian economists and the Center's been encouraged from the start to discover their common interests directly Some collaboration did in fact emerge from the direct talks of Millikan or Malenbaum with Indian economists

The RPC procedures for foreign sponsored organized research have probably provided a way of discouraging some carelessly planned and over ambitious schemes They have not, in this favorable case, become the channel for productive joint research

At the same time, this tactful approach demonstrates that India's splendid potentiality of illuminating through her contemporary experience many of the unknown relationships of development is matched by India's willingness to be studied, and by the willingness of Indian scholars to help foreigners in such studies

One feature of the MIT program which gave it added value from the viewpoint of Indian planners and which added to its economic merit was its international comparative approach. The fact that the Center was simultaneously studying developments in Italy and Indonesia made it easier to explain why the Center could not undertake applied studies on India's immediate problems. It set aside from the start the possible thought that the American scholars might be looking at India's economy through the blinders of a particular national history. This may be one reason, along with the stature of the Center's staff, which induced the joint sponsorship of a group of Indian economists of such heterogeneous views. All this is aside from the question whether the study could in the end arrive at explanations of economic development reaching across the diverse situations, and the disparate economic data, of the three countries studied.

The MIT venture was directed with the utmost strategic skill. This showed in a number of ways. Without it, the study in international communications might very well have become the focus of just such public criticism as bedevilled the Cornell project. The Center, moreover, skillfully avoided involvement in any of the potential tensions between host institutions or professors, or with the foundation, which overwhelmed the Cornell people.

Incidentally, though all these factors were favorable, the fact remains that the sincere attempt of the government of India, the Ford Foundation and MIT to get international collaboration in creative research sanctioned by a government committee simply failed to function. The present distinguished committee of sponsors was set up in talks of groups of individuals, some of them key officers of the Planning Commission and the Research Programs Committee, not officially by the RPC. Everyone concerned tried to work the formal machinery, but had quietly to turn to informal channels in the end. This case suggests two reasons. Group research of a basic or creative kind requires that the participants select themselves, in the sense that the group project must appear to the senior collaborators as of vital professional interest to them. Such intellectual com-

munion is where you find it, it would be almost impossible for a government committee, even a committee of scholars in various fields, to predict where such collaboration may emerge. The Research Programs Committee, however, had another disadvantage in trying to guide a foreign research institute to the proper collaborators. The official committee had to think of the general academic standing of the institutions in the country. The result was that the men whose institutions were nominated to work with the foreign researchers were inclined to be the men already most overburdened. The result could be worsening research bottlenecks in the attempt to avoid them.

The Research Programs Committee gave MIT representatives valuable advice on the general question of the need for various kinds of studies. Getting into the detailed approval of research designs, however, it had necessarily to feel its way so slowly that in fact the occasion for decision passed it by. The Center for International Studies was intent upon achieving genuine cooperation with Indian research scholars and institutions in designing research, gathering data, and interpreting it. One wonders whether that might have been achieved had Indian economists and the Center's been encouraged from the start to discover their common interests directly. Some collaboration did in fact emerge from the direct talks of Millikan or Malenbaum with Indian economists.

The RPC procedures for foreign sponsored organized research have probably provided a way of discouraging some carelessly planned and over ambitious schemes. They have not, in this favorable case, become the channel for productive joint research.

At the same time, this tactful approach demonstrates that India's splendid potentiality of illuminating through her contemporary experience many of the unknown relationships of development is matched by India's willingness to be studied, and by the willingness of Indian scholars to help foreigners in such studies.

Students and Recent Graduates

The kind of sisterhood relation or regular student visitation which tied a number of American liberal arts colleges to counterparts in Europe and even pre-Communist China have found very little place in India. There are exceptions. Briarcliff Junior College in New York has sent two graduates to Lady Irwin College in Delhi under a standing arrangement inaugurated between the two colleges in 1952, and Lady Irwin has sent five of its graduates to Briarcliff, also for a year each. In 1956 President Charles Cole of Amherst College asked the then president (vice-chancellor) of Osmania University, S. Bhagavantam, with whom he had become acquainted in the United States, to select two Indian college students to receive scholarships for study at Amherst. This arrangement may become a standing one, too. There are probably a few other such. The summer study tour of a foreign country by students under faculty supervision has been represented in India by the PIC (Pakistan, India and Ceylon) visitation from the Berkeley campus of the University of California. Started in 1953 by students with voluntary donations from the community, PIC was conducted for several summers under the Associated Students of the University of California and at one time received Ford Foundation assistance. Whether it will continue each summer is doubtful.

On the other hand, of the two apparently permanent programs sending American students or graduates to India, one is a transplant to India from China. The other has taken on a form

quite different from the European student visitations These two provide our cases for detailed examination

U C L A ' s PROJECT INDIA

In 1958 the University of California at Los Angeles' University Religious Conference sent its seventh deputation of students to India for a summer speaking tour The operation, known as Project India, lacks permanent financing and is loosely connected to the University administration But it has become a well established practice both at UCLA and in India

The University Religious Conference is an officially approved extra curricular activity With one or two numerically minor exceptions, the student religious groups of all sects and denominations are affiliated to the Conference, including the Jewish and Roman Catholic groups The Conference conducts four main activities Unicamp which is a camp in the San Bernardino Mountains for underprivileged and invalid children which is the official campus charity activity, Panel of Americans which is a program of talks by interfaith, interracial student teams to civic groups in California on the significance of each student's religious faith, Interfaith Council which among other activities conducts the campus Religious Emphasis Week, and Project India The status of the University Religious Conference in the University is symbolized by the fact that Chancellor Raymond B Allen signed letters soliciting money for Project India to men and women outside the University, but he did not designate it a University activity

The executive secretary of the Conference, Miss Adeline Guenther, started Project India in 1952 and has accompanied the students on most of the visits to India since then She travelled with the 1958 group A woman with white hair and a very personal approach to matters, she is known to all of the students in the group as ' Gram " Her role with the team in India was that of guide, chaperone and counsellor She left public speaking almost entirely to the students

In its 1952 visit, Project India had a volunteer labor aspect

Students assembled at the end of their speaking tour and did most of the hand work required to build a one room elementary school in an Indian village. This project has now been dropped. The standard program for the group in India is illustrated by what they did in 1958. Arriving in Bombay by air on July 4, the fourteen students split into half, Miss Guenther accompanied one group and another adviser, Mr. Don Ulrich, who is an alumnus of the Project India team of five years back, accompanied the other. Ulrich's group travelled over northern and eastern India, centered on Delhi and Calcutta. Miss Guenther's went almost immediately to Madras, and thence for stays of two days to a week in Madurai, Trichinopoly, Trivandrum (in the then communist governed state of Kerala), Bangalore, Poona and back to Bombay.

The chief formal activity of the groups is presentation of a very carefully prepared program of talks, songs and discussions in Indian college assemblies. A typical 1958 performance went like this. Franklin Johnson, the student group leader opened the program by explaining quickly why the group came to India, how they raised money to come, and that they would answer questions. Johnson was a June 1958 graduate in commerce. Mitchi Itami, who was an education major, explained as much as she could in five minutes about American education, illustrating with her own experiences. Milton Anderson, beginning his senior year as a major in political science, spoke on the position of Negroes at UCLA and in the United States generally. He is a Negro. Susan Silberberg whose major subject was English, and who was put up by the group for some of its exacting speaking engagements closed with what she calls "my flag waving speech." She tried to distill the spirit of American student life into the format of one day's experiences at UCLA. Meanwhile, written questions came in from the Indian students, Johnson distributed them to the team member who could give the best impromptu answer. This was of course, the liveliest part of the program. The entire group joined in a semi humorous song and with the permission of the principal of the college led the student audience in the Indian national anthem "Jana, Gana, Mana."

After the hour's assembly program was over, the Americans were shown about the college buildings and taken to tea by the principal and faculty As quickly as possible they got back to the auditorium doors, where the most interested students were invariably waiting for a chance to put further questions or arguments Real communication began here, the team believed To carry it further, they regularly announced that team members would be available later in the day at some nearby coffee house frequented by students This kept busy the three of the seven membered team who were not involved in the day's second or third assembly program "Since the coffee house discussions are held out from under academic authority," said one team member, "the students seem to be franker there" This was by no means the end of informal discussions "Bull sessions" went on in the rooms or on the roofs of the college dormitories where the Project India students were housed until one or two in the morning

Project India is regarded by the United States Information Service as worthy of official support Except in Bombay, however, the students preferred to arrive at a college by cycle or taxi rather than in the USIS station wagon The USIS also made advance bookings but the students were not wholly pleased because these included too many protocol teas and receptions, and because they tended to spread them over too many cities for short stays "We don't consider less than four days in a city is worth much," said Franklin Johnson "If we stay only two days, we attract interest, and raise a lot of questions in the students' minds We don't answer them to their satisfaction We go away leaving them in doubt" The team found that it is only after they reach a city, hold a press conference and put on their first auditorium performance that college authorities were inclined to give them an hour of assembly time That is another reason why one of them concluded "We like to hustle our own dates"

The group continually criticized its own performances—including a formal team critique each week—and made changes in the light of audience reactions In Bombay, in 1958, for instance,

they experimented with a more systematic kind of discussion On the two days before they left India, they held a seminar featuring group discussions of the topics about American student life and American policies which had provoked the most informal discussion. More than a hundred students from most of the Bombay colleges took part in this "seminar"

The present study does not purport to make a scientific evaluation of the impact of the UCLA students in India * But there are certain features of their program which seem ideally suited to winning a sympathetic hearing among Indian student populations, and even to disarming critics

The UCLA students live more nearly like their Indian counterparts than any other Americans in India That means they eat rice and vegetables in dormitory dining halls, sleep on plank beds covered with two inch mattresses, sometimes without mosquito nets, and use Indian toilets Some illnesses result, in spite of preventative medication One of the 1958 team, for example, contracted jaundice But for a two month period the group felt this risk worth taking to break down potential barriers of class and to dissolve the idea of the rich capitalist nation

The group embodies, in its own inner relations, many of the things it is saying about American education and student life Miss Guenther's role was obviously that of adviser, and not superior Franklin Johnson, student group leader, obviously maintained his role by virtue of his sense of responsibility and skill in using the talents of the team The consideration each student demonstrated for the opinions, talents, tastes, and information of his fellows was not a bad symbol at a personal level of the civilizing function of a university

The very insecurity of Project India, the fact that so much of its support is raised by the students themselves, and the re-

* During the writer's Fulbright lectureship in a south Indian college in 1952-53, the UCLA students who spent a day there achieved greater rapport with the student body and drew very much more interest, than any of the four well-qualified American lecturers who addressed the student body during the year

mainder by the initiative of a voluntary extra-curricular organization, is impressive evidence of personal initiative and person-to-person rather than governmental auspices Over the seven years of Project India, this impression is fairly well justified by the facts Exclusive of transportation to India, the project costs \$2,000 per student Air transport is provided free by Trans-World Airlines In 1958, one of the team members thus explained the source of the requisite \$28,000 The United States Information Agency, after much hesitation, gave \$5,000 The Standard Vacuum Oil Company gave \$5,000 Each of the fourteen students himself contributed \$200 in addition to providing his own pocket money Two Los Angeles businessmen, responding to Chancellor Allen's appeal contributed \$1,500 apiece The rest came in small contributions Only when the USIA contribution was received, eighteen days before flight time, was it certain that there would be money enough to permit the group to go Over seven years, the Ford Foundation contributed twice, the Rockefeller Foundation contributed the first year In 1957 the USIA provided \$15,000 The year before, money sufficed to send only half the group

By far the most remarkable thing about Project India is the care taken by the University Religious Conference to select the fourteen members of the team Interest is aroused in September by many campus appearances of those who went to India in the previous year In October 1957 some two hundred applications were received for the 1958 team These went through a formidable series of screenings, a battery of three group interviews of each candidate by members of the previous year's team, a four hour written test of rational thinking, verbal ability, social intelligence, and information on public affairs prepared by the University testing service, a carefully scored "leaderless discussion" in groups of eight students each on such topics as "How would you explain Little Rock to a group of Indian students?", responses to some of the roles they might meet in India as acted out by last year's team members ("How can I get to UCLA to study with all expenses paid?" or the Indian woman student too shy to utter her question), a twenty minute seminar report

on an Indian topic prepared by library work over the Christmas holidays, observation of the candidates' behavior in a culturally strange situation (in 1958 this was a dance in the Mexican quarter of Los Angeles), and a very strenuous weekend at Unicamp, where the surviving candidates, after washing dishes and collaborating in skits ranked each other in response to the two questions 'Who should go to India?' and 'With whom would you like to go?' This whole procedure stretched over October to February At the end of it, the University student counselling center, which had had observers in the various phases, prepared a "profile" of the strongest candidates—twenty-four of them in 1958 From this the selection was made finally by Miss Guenther All along, of course, consideration had been given to the varied religions, races, and academic fields that should be represented on the team

This selection procedure far exceeds that used to recruit any other Americans going to India, both as to its intensity, and the expert knowledge brought to bear in planning it Is it worth it? Applied to a student population willing to endure it, it not only gets the very best people available to India, but it has these ancillary values The care taken in selection must certainly add to the prestige of Project India, partly because it signifies the importance the sponsors attach to representing American student life before Indian students, partly because the previous team, being so select a group, tend to attract worthy successors The internal relations of the group and the choice of the student leaders (one for each of seven) almost fall into place of themselves, so well does each team member come to know his fellows, and so thoroughly has he himself understood and taken part in the selection A great deal of training is accomplished in the process of selection, and in February, the high morale group of those selected is motivated to carry on a weekly seminar through the whole second semester The seminar carries no university credit, "It was worth ten credits of academic work," said a member of the 1958 team Many Americans who come to India blame somebody for not orienting them properly to living and working conditions The Los Angeles procedure makes it a part

of the testing and preparatory procedure to find out for themselves what they will encounter The group testified that they met few surprises when they arrived Perhaps most important of all, the group who survived to enlist in Project India knew they wanted to come, and why The Americans in India who had the most adverse material conditions also exhibited the highest morale

Judging merely from the statements of the participants in India, the UCLA project has a significance for them as intense as the careful preparation would lead one to suppose One former student leader of Project India is now an officer of the United States Information Service in Calcutta Others have gone into other overseas government jobs A young woman of the 1958 team, whose college major is English, did not anticipate any such vocational carry-over, nevertheless she attributed thoroughgoing changes in herself to the two months (and, no doubt, the preparatory year) of Project India

Before I came I took scarcely any interest in politics Now I have had to find out something about American foreign policy, about how the US is governed, about some of the issues and conflicts in our domestic life The other thing I am aware of now that I wasn't before is what has made the United States what it is today I don't take things for granted Of course, another value is that it has entirely cured my self consciousness

The reorientation in personal values may be a basic one

A sorority sister of mine was on the team last year When she got back she found it difficult to adjust The daily life at UCLA seemed superficial to her now I know I have changed a lot as a result of this summer's trip I hope I will be able to adjust better, though

A TRADITIONAL PROGRAM TRANSPLANTED

The Oberlin Shansi Memorial Association has, since 1951, sent eleven recent Oberlin graduates to India to teach English in Christian colleges. It has sent out one Oberlin professor for a year as senior representative. This program, in contrast to UCLA's, continues an old tradition on an old endowment. Moreover, the junior representatives stay abroad for two academic years. Those who go make a real commitment, the problem of gaining a corresponding benefit for them and for the institutions to which they go is correspondingly greater than for a summer visitation. The Oberlin Shansi program stands in this sense somewhere between Project India and the senior university technical assistance programs.

When Oberlin graduates were first sent to India in 1951, it was because the Oberlin Shansi Memorial Association had been forced to withdraw its personnel and financial support from communized China. The Association was formed in 1907-8 as a memorial to a still earlier group of Oberlin graduates killed in China in the Boxer Rebellion. A substantial endowment was provided by Mr. Charles Martin Hall, discoverer of the process of smelting aluminum. In China, the Association founded its own school, "Ming Hsien" in Shansi Province. It grew to be an outstanding coeducational middle school, with work in agriculture and home industry. Turning over direction and most of the teaching (save agriculture) to Chinese nationals, the Association began in 1918 sending recent Oberlin graduates to teach English at Ming Hsien for two year terms, at the end of which they returned to Oberlin for a year of graduate work. Forty years later, this is still the pattern of the Oberlin Shansi "Representatives."

Expelled from China, the Association temporarily assisted "Obirin Gakuen" in Japan. Three years ago, it began sending representatives to the new Tunghai University in Taiwan. Tunghai had just been founded by the United Board for Christian Higher Education in Asia. The Association has stabilized this relationship now so that it will maintain three representatives and

a senior staff member in Taiwan, and bring students or faculty annually from Tunghai to Oberlin

Meanwhile, the Association had been seeking a place to work in India In the outskirts of Madurai in the far South were two adjoining colleges, the seventy-five year-old American College for men and Lady Doak College for women opened in 1948 Both had been founded by the American Board of Commissioners of Foreign Missions and were now affiliated to the local diocese of the united protestant church, the Church of South India In 1951, pending direct arrangements with the colleges, the Oberlin Shansi Memorial Association sent its first representatives to the Madurai diocese Mr and Mrs Joseph Elder, recently graduated from Oberlin and recently married, were a versatile and energetic couple Both taught English and Mrs Elder taught music in mission supported high schools Mr Elder introduced a lively program of dramatics at American College, and Mrs Elder did supplementary teaching of religion and drama at Lady Doak By 1953, when President William E Stevenson of Oberlin visited India under State Department auspices, the two colleges agreed to make use of a young man and young woman representative on a regular basis In 1957, the Oberlin Shansi Association began a trial program in a Christian college, central India, sending two representatives and a senior professor there *

The Oberlin Shansi Memorial Association, which is not administratively or legally a part of Oberlin College, has very close connections with it Oberlin officers, alumni and faculty are trustees, the Association offices are in the College, and a student committee of Oberlin undergraduates plays a key part in selecting the representatives This committee is composed of two men and two women students elected by each freshman class, plus one man and one women elected as sophomores In October each year it solicits applications for service in Taiwan and India Interest in being representatives dropped off somewhat after

* This report is based on interviews with the two representatives now in central India, and the two in Madurai, and the acting principals of the Madurai colleges

five hours per week in one case), and the generally low level of student interest. This is not a highly productive use of their time.

One of the greatest needs of Indian colleges is for extracurricular activities in which students have stimulation and guidance but develop their own initiative and self-control. Oberlin representatives have made distinctive contributions in this direction. Of the four now in India, Miss Margaret Eaton at Lady Doak conducts the college choir in western music three days a week, and teaches music in the affiliated high school as well. She has seven students who are learning to play the piano. Mr. David Lockwood at American College coaches the college tennis and basketball teams. "They have learned the value of rigorous workouts and strict training," he reports. In central India, Mr. Charles Gosselink coaches swimming, Miss Charlotte Penfield has a Bible class, plays the organ in church, and leads the YWCA Young Adults Club. The acting principal at Lady Doak attached great value to these "special skills." Of Miss Eaton she said, "She is more qualified in music than any of us," of an earlier representative, "She could stimulate the girls to discuss social issues."

Status is defined with great precision in most Indian colleges. But the representatives do not fit any of the definitions. One representative in response to the question whether she was regarded as a faculty member, replied, "No. But I attend faculty meetings. The problems I bring to the Principal are faculty type problems." The Principal herself said, "We invited her into the senior staff quarters. She is one of us . . . We think her very youth is an advantage. We are a young faculty." The warm personal reception in this institution is not equalled in the others. And the faculty role may prove beyond the training and experience of the representative. One of the young men was given regular English classes some years ago. He tried to recreate in his classroom the Oberlin informality. The students were interested in preparing for examinations, and accustomed to authority. He lost control of the class. Considering the whole experience it is a remarkable thing that with their duties unclearly defined, and their status anomalous, these recent graduates have found useful work, and maintained good morale.

One reason, of course, is that these are young men and women with a somewhat unusual motivation to serve others, going into church-related colleges. The motivation may have family origins. Two representatives have been sons of missionaries in India. In other cases the interest has been kindled by a close college friend who was a representative. Likewise, the host institutions all of which receive support from American missions, and some of whom have American trained principals, tend to value American educational methods and student life. Wishing to maintain what they call the "Christian character" of their institutions while taking government grants and having fifty percent or more non-Christian enrollment, they desire the aid of someone who can do some religious teaching, or who can stand for Christianity among the student population.

There's the rub. The primary interest of the Oberlin Shansi Memorial Association "has always been to support Christian education in Asia." But while Christian education tends to be quite liberally and even ambiguously construed in a Christian culture, Indian Christians expect it to have a sharp cutting edge in an overwhelmingly Hindu nation. Over the years, a mutual understanding of the difference in point of view has been attained between Oberlin and the Madurai institutions. There is not agreement. One representative chosen by the Association was not accepted by the host institution in Madurai. A Unitarian, she was far removed from an evangelizing spirit. The Association points out that under its selection procedures, there is no reason why a Jewish student should not be chosen. After a good deal of discussion, the principals have taken the stand, urged on them not only by the Association but by the Bishop of Madurai, that "We recognize the fact that the representatives appointed may not in every case be Christians." But "the two colleges in Madurai are Christian Colleges. They are part of a pattern of activity whose overall purpose is to make Christ known as Lord and Saviour. It will be essential that the representatives whatever their own personal position are prepared to work loyally within the framework of the Colleges as now constituted."

The principals categorized the previous representatives quite sharply into two groups. "A _____ was constantly saying 'I'm

not a missionary' She recoiled from proselytizing in the Student Christian Movement. But she never missed the Sunday service, to which she would go by cycle at 6:00 A.M. On the other hand, B was very religious. So was C. When we wrote to Oberlin, we said we wanted people who were Christians."

"The men who come aren't settled," was the way another principal expressed it in the presence of a missionary staff member supported by the American Board. "But D became committed to the Christian vocation. The other two did not."

Even for one representative who works with the Student Christian Movement, proselytizing does not entirely harmonize with education, while the tendency to expect Americans as representatives of a Christian culture, to champion any particular variety of Christianity seems puzzling. Characteristically, the representative thought of it as a challenge. "I feel there is a job to be done by Oberlin representatives of broadening the view of what a Christian is. This Christian faculty is not wholly fair in telling students, because a student has a right to come to grips with many points of view and hammer out his own."

In evaluating the impact of the Oberlin Shansi program on the host institutions the best evidence of the attitude of the heads of those institutions is their reaction toward the extension and regularization of the program. The head of the central India college, who keeps a tight rein on his institution, was unwilling, after a year's trial of two representatives as English tutors, and with an Oberlin professor on the ground as senior representative of the program, to make any commitment to support and utilize the building, representatives, and resident director which the Association offered on a continuing basis. The Association's program will not continue there.

In Madurai a vigorous effort has been made to keep the program, and a good deal of thinking has been done by the college authorities with the bishop and the Oberlin professor during 1957-8 as to how it might be given more definite shape. Their idea, which has received the general support of the Oberlin Shansi trustees, is to continue to use the representatives for the supplementary teaching of English outside the University pre-

scribed curriculum, and for extra-curricular activities having educational values But these would be interlinked and given attractive facilities and professional supervision by building a center for them near the campuses, and stationing in it a senior permanent director, a faculty member trained in the teaching of English as a foreign language Students coming to the center for tutoring in English would thus find the language leading into use of the center library, films, and recordings, and into the discussion, drama, music, painting and social activities going on in the center The Madurai college authorities were hopeful, in spite of the conservatism of parents on this score, that men and women students might be allowed to use the center together

There is no doubt that this proposal builds upon a great asset of the Oberlin representatives, their ability to identify themselves with the students and junior faculty of the institutions to which they are attached There are several reasons for this ability The Americans stay two years They learn Tamil, the regional language of the Madurai area They spend their holidays in the homes of Indian friends Their living standards, except for more extensive travel in India, is that of the junior faculty of the host colleges All this may have been in the mind of the acting principal of Lady Doak College when she stated as the greatest value of the program the "contact it gives us on our campus between East and West We prefer the broad contribution and personal contribution to department and academic teaching" The demonstrated ability of the representatives to enlist participation in a variety of extra-curricular activities would be strongly reinforced by the facilities of a center building

The Madurai proposal seeks to remedy the greatest limitation of the program insofar as its existing impact is concerned For the first time, the teaching of English to foreigners is recognized as a task requiring specialized academic skill and professional supervision Approached in this way, this contribution is one India needs keenly The need has been recognized by the University Grants Commission, and the government of India has created an institute in Hyderabad to train English teachers The question the Association will need to answer is how to combine

a professional approach to English teaching with the extra-curricular character of the center

The impact of the program at Oberlin has always been of great importance to the Oberlin Shansi Memorial Association Representatives, on their return from two years abroad, are given a year's fellowship to do graduate work at Oberlin Aside from the informal opportunities this provides for discussing their experiences, they speak at one all-campus meeting, and dine for one week periods at each of the campus houses During their work overseas, they send back monthly letters which are ordinarily reported in the college newspaper Representatives take very seriously their role of present and future interpreter of India to Oberlin students "The work we do here is affected by the rudimentary preparation of the students in the Indian colleges But the work of reporting to Oberlin takes intellectual prowess" Sometimes, indeed, a representative has to ask himself whether he should take some time away from the college in India to which he is attached in order to prepare himself with a more general knowledge of India.

The impact of the program on the individuals who go to India of course varies greatly from person to person Two of seven returned representatives used information gathered in India for their masters' degrees, one in sociology, one in South Indian music All, of course, gain a great deal of less specialized knowledge of the eastern world All go through a socializing experience in which they bear more responsibility for leadership than would otherwise come their way

The overall value of the experience to Oberlin graduates is one thing for women and quite another for men Being a representative interrupts a young man's vocational career by two years Added to the hazard of a further military interruption this is a very high price to pay for the experience It means, incidentally, that at least half of the male recruits have come from missionary families and have lived in India as boys Not surprisingly, the same difference which shows up in recruiting shows also in the evaluation of the program by representatives now in India The men are less sure that they are doing a valuable job,

particularly in their tutoring. The double burden of doing a job at which they are amateurs and winning a place for themselves beyond their formal qualifications is, for some, a source of self-doubt rather than self-discovery. This is a problem which could be partly solved if the work of representatives could be given a professional aspect.

On the other hand, the chance to be a representative appeals to a much wider circle of Oberlin women students. Those who come may have talents hitherto undiscovered, and they are more likely to have the intellectual ability and self-confidence to put them into use. "I have had a 100 percent happier teaching situation than S (her male counterpart)" said one woman representative. Another gave an account of the personal development of which she was aware after six months as representative:

I feel I'm still a student. But I am older than the girls I tutor. I have had more experience. I would like to develop them in a certain way. . . . When I go back I will not do graduate work in music (her undergraduate major). I had planned graduate work in history. Now I'm undecided . . . (After discussion of another point) The reason I'm undecided is that I had never thought of being a teacher. Now I do. When I take graduate work, I will be thinking of that.

CHAPTER 9

Conclusions: The Jobs Being Done

The eight programs of American colleges in India we have surveyed first hand are far too few to permit one to single out with scientific certainty the particular factors to which their successes and failures are due. These eight do, on the other hand, present variety enough to provoke serious consideration not only of alternative methods, but of alternative purposes for American college activities in and for India. In this and the following chapter the conclusions suggested by comparisons among our own case studies will be tested by a limited amount of other evidence—the experience of the partly analogous activities in India of church missions, philanthropic foundations, and the Fulbright program. The advantage of so wide-ranging a comparison is in its suggestiveness. The chief hazard is in unwittingly applying the lessons of one kind of program to a different kind of task. It is to control this hazard that we must think as rigorously as possible about the kinds of jobs that American colleges have done and can do in India.

PURPOSE TO HELP INDIA

At home, American universities pursue knowledge; most of them also aim to serve their communities. Some perhaps clearly assign priority to the first purpose. Most would rather regard it as the indispensable prerequisite to the second. But if one con-

siders what American universities are doing in India, the order is reversed Service comes first Knowledge is taken for granted

Of forty-nine Americans in India on organized university programs, thirty-eight were there mainly to render a service to the country Only three (the developmental economists from Massachusetts Institute of Technology) are in India with the clear purpose of enlarging scholarly knowledge A few others including the Oberlin graduates, cannot so readily be categorized

What the numbers show is what the universities and the sponsors of the programs intend "Technical assistance" is, of course, the aim of the Indo-American agreement on which International Cooperation Administration programs rest To help India achieve steady economic growth and its declared social goals is the mission of the Ford Foundation program administered in India The dean of agriculture of a land grant college operating a large contract in India expressed the same motivation "We have always aimed to put the knowledge we had at the disposal of the farmers in our state All that we are doing when we work in India is to enlarge the boundaries of the 'community' we serve "

Nor can there be any doubt that service, not scholarship, is the test of success of at least ten of the thirteen American college teams working in India. This is quite clear not only from their own descriptions of their goals, but from the things they publish To illustrate the members of the two land grant college teams we studied, in twenty-nine man-years in India, produced a first-rate textbook on the use of Indian soils, several extension bulletins such as "Some Uses of Milk in the Indian Home" or 'Fundamentals of Irrigation,' and collected some information which was to be published later, such as Dr Albertson's study of certain Indian grasses At the same time, they turned out scores of curricula, instruction manuals, plans for new departments including building layouts, and H W Hannah's *Blueprint for a Rural University* These people were concentrating on their objective service

The contrast of the two programs we studied, the only two ever conducted in India by American colleges to gain new knowledge, is sharp The Cornell anthropology project yielded

seventy two scholarly papers and articles. One book has come of it, and others are being published. MIT's work in India in the two fields, economic development and communications, had by the beginning of 1958 produced forty-five publications, including four books. In both cases, the publications contributed first rate ordered knowledge to the disciplines involved.

If we examine the present growing edge of college work in India, we find the service programs promise to claim even more of American resources than they have in the past. As we saw in our introductory chapter, India's initial attraction for American colleges was just what their own cities, states and regions have always constituted, a field for learning as well as extending knowledge. Anthropologists Gisèle P. Steed and Morris E. Opler began their researches even before the first assistance projects at Allahabad Agricultural Institute. MIT's research project grew alongside the principal service contracts of ICA. The service contracts have been renewed and extended, but since 1954 no new American college has succeeded in organizing a program of scholarly learning in India, though at least one highly qualified institution has made the attempt.

These facts warrant an almost unqualified conclusion. What is shaping up in India for American colleges is not the traditional university function of research, teaching and extension. It is an extension function.

The proposition that a university should conduct in its home state or community a program of extension not combined with teaching and research would at once raise at least two questions. Does such an institution have the knowledge it needs to extend? Secondly, can it enlist competent faculty people to do a service function only? It is logically possible that the particular services our colleges have been engaged on in India may call only for knowledge they have accumulated in their domestic research and teaching programs. It is also possible that men and women of the required caliber can be attracted to India upon a service motive more easily than they could be got to do more prosaic service tasks at home. These are suppositions, however, which we must examine in the light of the experience revealed in our cases.

Before we do this, we should perhaps examine a subsidiary question. Organized college programs are only part of the use of American college resources in India. Do direct government and foundation programs, or the Fulbright program, balance the total effort by stressing the acquisition of knowledge? More to the point, do they gain knowledge that organized college programs can extend? As to Fulbright grants to Americans, we can be quite clear. Half of them are available to graduate students doing research. One-third of the faculty grants are for research. If we ask the more penetrating question what the faculty grantees actually did, we find fifteen, of seventy-eight whose reports we have, primarily acquired new professional knowledge, twenty-two combined gaining knowledge with technical assistance, forty-one, or more than half, rendered assistance of some kind to an Indian college, including six who taught about some aspect of American life. Aside from the question whether an individual professor or graduate student in India for one year can gain knowledge general and reliable enough to meet the needs of the large American extension efforts, there is the further stubborn difficulty that the Fulbright research projects are unconnected either by institution or subject matter with the service programs.

Interestingly, it is the foundations in their directly administered programs that demonstrate the closest mutual reinforcing of knowledge with service in India. It is precisely because the Virus Research Center in Poona (jointly operated by the Rockefeller Foundation) identifies an unknown virus and gains some understanding of its life cycle that it can help control an outbreak of virus disease. The institute on Indian linguistics of the Deccan College, in which three or four American linguists are enlisted each year, studies Indian languages by the methods of scientific linguistics, but this knowledge can be channeled into language teaching if that be desired. The Ford Foundation has achieved the same sort of thing with some of its directly recruited consultants. One of them, anthropologist Oscar Lewis of the University of Illinois, produced a fruitful new concept about the social organization of Indian villages. He did it by field research during his term as adviser to the Indian Planning Commission on evaluation of the new village development program. Approaching

to the evaluation of Indian development efforts. The Planning Commission wanted help from these researches in formulating its plans. The remaining five service programs we can rank in a progression according to the scope of the impact intended and attained. The University of Illinois was expected at the Indian Institute of Technology to supply individuals to teach particular subjects or set up particular laboratory research facilities. Even so, one "technician" on this contract, Professor Ralph Hay, is credited by his successors with the role of having established and given its character to an entire department (The department had formally existed two years earlier). He is generally regarded as the most successful of the team. The Ohio State secondary education team had a well defined mission—to develop inservice training methods in their fields of specialty in teachers' colleges. The very fact that the institutional framework within which they worked had been fixed, though, was itself the product of earlier joint planning by Indian officials and Ford Foundation and TCM staff. The University of Tennessee home economics contract had the objective of selectively developing a whole, largely new, discipline. The scale was India wide. Kansas State College and the University of Illinois agricultural teams did two kinds of work. Individuals conceived (always in collaboration with Indian counterparts) pilot or demonstration programs in such fields as grasslands conservation in a region of a state, or poultry raising as a business throughout central India. The teams advised state policy makers on the setting up of integrated research-teaching-extension institutions, state-wide, or as a development of particular agricultural or veterinary colleges. The extreme of policy advising is the Illinois role in consulting on the creation of a new university, including the wording of its legislative charter.

If we inquire whether the changes sought in these college efforts were mild or drastic, we can detect a similar range of variation among them. Except for the engineering contract, the American colleges were expected to take part in a basic reorientation of education, reaching even to the values emphasized. Granted this, was not the new pattern delineated for the teams by the Indian government? To be sure, general lines of change

were laid down in the Five Year Plan, and they were not crossed. Clearer were the recommendations of high level policy commissions. But as our account of the scheme for a rural university reveals, even the most carefully considered of them involved ambiguities. Such was the narrow but deep difference between the rural university championed by the University Education Commission of 1947-49 and the rural university proposed by the Indo-American team of 1955. A similarly unreconciled competition of purposes confronts the field of domestic science. In a third field, policy guidelines have been recently drawn by the Secondary Education Commission, yet there are a number of divergent interpretations of the "multiple-purpose high school" which the new Ohio State contract is to help extend throughout the country.

In all these programs, the American who functions in fact as a technician performing a predetermined task is a rarity. Slightly more common is the other extreme—the policy adviser. The majority of college team members fall between. The most accurate general designation for the work they have been doing in India is *program development*.

The distinction is a crucial one. One hopes that the science, and many of the techniques and professional standards possessed by American faculty members are good for export. But to develop programs in India an American needs somehow to integrate professional and cultural considerations, and the cultural considerations are mostly strange. This it is that creates the risk, the risk which cannot very well be calculated, of an American college approaching India as an extension project. A good idea can be formed of the hazard by supposing the shoe on the other foot. Imagine a Danish specialist in rural adult education brought to the United States in 1916 to advise an American college of agriculture in setting up its curriculum to train county agents. Or imagine a professor of history from one of the fine German universities assigned in 1880-82 not to develop a graduate seminar in history, but to help "modernize" and "strengthen" the whole system and discipline of history teaching in an American state, from high school through graduate education. Now

multiply this risk by some factor that takes account of the greater cultural difference between America and India than between the countries which share the European traditions

But this kind of supposition misses much that is distinctive in the situation of the American developing programs in India—as much on the side of opportunity as of risk. If our analytical hypotheses about the Indian-American relation are approximately valid, it is not only cultural commonness or difference that counts, but cultural complementarity, though that may be genuine or spurious.

The fact is that Americans who know little about Indian culture, and who stay twenty months, are wanted to plan and demonstrate programs, and the programs they try out do often work. Some of the reasons may come out of the very differences of the cultures. Among Americans, for instance, information tends to flow readily, not only down the hierarchy but up, and across to persons in other organization units, indeed to and from citizens entirely outside. This is just what the Indian government department or university may lack, not for lack of desire to communicate, but because the organization is partly the product of a compartmentalized tradition. Our cases show that the influence of a temporary adviser from an American college who speaks no Indian language may actually be to germinate a program more relevant to village conditions than those conceived before. He may be so useful in closing the gap between the planned target of the government (however ambiguous) and the capabilities and motives of the economic producer (however crudely he grasps them) that his proposals take on an unexpected Indianness.

The complementarity may be spurious, too. A special prestige may attach to the role of adviser, or trainer of an understudy, in a culture which has been conveyed through emulation. It is possible for the foreigner, whose credentials bear the magic stamp of "modernity" and 'Western science' to slip into the role once occupied by the Brahmin, and later modified by the Britisher. Each was respected because he could show how the local and the traditional could be fitted into the great culture—the culture

of Hinduism, or the culture of the West. The first set an example and recognized its acceptance by the lower orders. The second administered change directly. But neither could kindle the responsibility or inventiveness of those they influenced so powerfully as long as they were there. For each relied on emulation.

Advising versus Demonstrating Those who plan large American programs in India, whether in foundations or in the government, make full allowance for the ignorance of Americans about India as well as for the need to recognize policy decisions as Indian. This is perhaps the reason why American college team members, like others in India, are called 'technicians', not program developers, and why their work is thought of as advice, not demonstration. But the first term conveys an inaccurate notion of the very programs we have found most successful, and most highly regarded in India. Ralph Hay showed agricultural engineering training in operation, F W Albertson demonstrated grasslands conservation, Warren Schoonover soil salinity control, Earl N Moore poultry raising Roy Donoghue agricultural textbook writing, the Ohio State team teacher training, the Tennessee domestic science team vacation workshops. Less directly, MIT demonstrated concepts and methods of economic research. In all these cases the advice was implicit in their performance, better, in the performance of their Indian associates. They developed programs to be carried out.

On the other hand, we have found examples of fully effective advice, too. H W Hannah provided it in the state of UP, certain of the land grant college team group leaders are providing it now in their states, F Champion Ward provided it to the nation's education policy makers, Frank Parker to those in agriculture, Douglas Ensminger throughout the developmental leadership of the country. What are the common characteristics of these men? Personally, they brought to India experience in developing large programs, and in getting them decided upon by governments or university administrations. Not a single one came direct from a professorship, a professor may be a good adviser on program development, but some of his most creative qualities are no help to him here his concern with abstract ideas couched

in words or symbols, his unfamiliarity if not suspicion toward hierarchy. Probably the more distinguishing characteristic of these men is that all somehow got thoroughly acquainted with the Indian situation. They did it by long experience in India (Ensminger and Parker), or by skillful use of their own staff as informants and extraordinary competence in talking frankly with Indians in positions of responsibility (all the above cases). When advice was wanted, and when Americans could give it, its impact is probably (though by its nature one cannot trace it precisely) far wider and deeper than the impact of demonstrations.

May the implication be that for the American "technician" new to India and serving pretty much in an individual capacity, the demonstration is a personal experiment to find out what advice to give, and whether he knows the Indian situation enough for his advice to be taken as practical? The partial confirmation is that of eight successful demonstrators cited above, at least four emerged in true adviser roles. It would obviously be detrimental, without changing a great deal else, to insist that 'technicians' avoid demonstrations to concentrate on advice.

But whether accomplished through demonstration or advice, or both, the actual program development role puts three problems before the American college. How are technical people possessed of the creativity required to develop programs to be drawn to India on motives of helping India, not gaining new knowledge? How are they to be kept there long enough for sound plans to be worked out, and built into Indian institutions? Above all how are they to know what organizational form, what pragmatic strategy, will attain the agreed goals?

Conclusions: How the Job Is Done

WHY TRAINING IN AMERICA SUCCEEDS

There is a good deal of evidence that the training of Indian faculty members in America—"participant" training in ICA jargon—is the most successful of the techniques employed by the service programs. It is the technique generally proposed for expansion, even at the expense of American personnel or materials. During the first four years of actual experience with the five land grant college contracts, the planned total of American specialists to be sent to India grew from thirty-seven to forty-five. The number of participants to be trained in the United States, however, was raised from thirty-five to eighty.

We have a good deal of knowledge about the general reactions of Indians returned after training in the West* and while they are in America †. Have the psychological and social adjustments which seemed strenuous and even hazardous in these studies beset the returned participants of college contract programs? Except for a small minority of individuals the answer is, clearly, no. Part of the evidence has already been presented for the agricultural contract program we studied. In the case of the participants returned to Indian Institute of Technology from the University of Illinois, reactions were not uncritical, but they were

* John and Ruth Useem, *The Western Educated Man in India* (New York: Dryden Press, 1955).

† George Coelho, *Changing Images of America A Study of Indian Students' Perceptions* (Glencoe Illinois: Free Press, 1958).

highly favorable on balance Extracts from a group conference with Institute faculty members back from Illinois will give the tenor of their appraisal

Q Were the specific courses you were required to take valuable? At this Professor A said, "Of course you must realize that if we had had a year's time free from our work here, and if we were left entirely to ourselves here we could have gotten along just as far" One other man agreed A little bit later in the discussion, however, Mr B and Mr C directly challenged the point They said, "It makes a great deal of difference whether you are required systematically to go through a text and whether you are expecting to be tested on it You aren't in a position to teach a subject unless you have had this kind of rigorous instruction One of the good things about American instruction was that they told you definitely what you were supposed to learn within each period of time, and thus even a person who is not the most brilliant one in the class is still impelled to get this material "

Q What changes in your present work are you aware of, which would not have taken place had you not gone as a participant to the University of Illinois? Professor C replied, We got specialties of applied sciences which have not yet been developed in India Partly this is a matter of equipment" Professor D added, 'There is a difference in the way professors consider the students there They call you by name and not by roll number This is something I have taken up doing here The boys appreciate it You can get more out of them in this way' Mr A confirmed this 'Our professors made us feel exactly what they told us that we could call them up at two o'clock in the morning if we had something we were doing regarding our subjects which needed their attention

Dr E said, 'Of course one of the great values were the contacts we made with the really great scholars the men with international reputations Occasionally we exchange letters still, and reprints

Mr F replied to the question by telling his own story "I had no degree in my field, only a diploma The University of Illinois was reluctant to accept it as entitling me to

graduate standing As it turned out, I made high grades at the end of the first semester They then accepted all that work as credit for a MA By staying two years I got a master's in my own field, and also in a related applied field Now the effect of this work and these degrees on me has been to give me confidence that I never had before When I now make proposals about what the curriculum ought to be in my field my department chairman listens to me The other thing I learned was very specific Instead of a full year's thesis, we now give the boys one semester of supervised projects, followed by one semester of independent thesis work We get a great deal closer attention of the teacher to the student Even the boys who do not have exceptional talent could be coached enough to qualify them to do a good job Earlier, when we left the boys pretty much on their own in the final year the highest marks given by the outside committee of examiners was 65 points Last year after I introduced the project system the lowest mark in the entire class was 65, and the highest was 90 "

The favorable consensus is the more significant because this is a particular contract relationship which has not in some other respects satisfied the University of Illinois, the government, nor the Indian institution.

The evaluation of the Indian Steel Training and Educational Program by the young Indian steel mill engineers who went through it agrees with this general conclusion Carnegie Institute of Technology coordinated the academic portion of one year's training for two hundred future technicians in the three new government steel mills of India The American steel industry provided in plant training, the Ford Foundation sponsored the project *

* A full account of this remarkable training venture has been prepared by Mr K. A Shenoy Superintendent of Training for the Tata Iron and Steel Co., Ltd, who was consultant to the Ford Foundation in preparing for it *Report on the Training of Indian Engineers in U.S.A for the Government Steel Plants* (Jamshedpur, India Tata Co 1957, mimeo) Parts I and II The above appraisal is also based on a group interview of eight returned trainees arranged for the author by Mr Shenoy

The technical reason for the success of these projects to train Indians in the United States is that the training was in almost all cases skillfully organized. It is difficult to suggest any substantial improvement which could be made, even with the benefit of hindsight, for instance, in the INSTEP or University of Tennessee home economics training programs.

Behind this excellence, however, is perhaps a strategic advantage in this particular contact between the members of the Indian educated elite and American life. If American culture is peculiarly "given", and of a piece,—as has been our hypothesis in comparing the American with the Indian cultural context—then we can easily see why it might be as convincing *in situ* as it might be difficult to export. Certainly it is the value system internalized in Americans, manifested in their most homely relations with one another, that makes the most profound impression on these visitors.

Consider, also, the personal situation of the Indian educator taking training in the United States. It is a temporary blow to his ego, to be sure, to become a student again. But what he learns becomes his own.* He selects from the superabundance of offerings not of graduate school alone, but of American life. What adaptations he makes of American knowledge and American ways of life to his own culture are his own, too. He need not emulate. He can, to whatever extent he chooses (save perhaps the phonetics of his English) *become American*, but he is an Indian making the choice.

If American values or techniques are to be useful in India, someone must translate them. Participant training puts that responsibility on the culture which is cosmopolitan but not yet integrated, sending the American overseas puts the responsibility on the culture which is integrated but not yet cosmopolitan. Disregarding questions of profession and subject matter entirely, the advantage is all with the first alternative. If a

* An interesting confirmation of this point comes from those Indian colleges in or out of organized relation with American institutions, whose principals (deans) turn over full responsibility to department heads to develop modern teaching and research programs. The department heads are commonly men whose graduate training has been abroad and for whom the desired goals are internalized.

culture needs to find itself, it is certainly better to let it do its own borrowing.

To state this is, however, to point to the potential hazard of all foreign training programs for participants from rigid hierarchies and crusted status systems. Will they have a chance to express what has become part of them, on their return? For the individual "foreign returned" Indian, this is an ominous doubt, whether he has studied abroad under Fulbright, government, or even sometimes foundation auspices. Much less so for the participant in a college contract program, or in INSTEP. The steel mills are starting fresh, with the technological imperatives of steel making opening the way for the man who knows what to do. Contract participants go back to institutions selected because they have promise for the innovations decided upon by the Indian government, and watched over by Indian and American observers sympathetic to them. More use could be made of short term visitations to America by Indian college principals who do not yet fully share these goals. Even so, only one participant interviewed in this study had not found an opening for what he wished to do when he got back. Participant training minimizes the usual hazard of foreign training precisely because it is organized as part of a larger scheme of program development, including the use of joint policy planning teams and American specialists overseas. Isolated, it would face the ordinary risks of frustration.

PLANNING AND OVERPLANNING

Proper preparation of a project is the most general and the most serious need detected by the Americans working in India. Those who come on organized college programs, by definition, benefit from a great deal of prior consideration and agreement which is not even attempted, for instance, in deciding upon positions to be filled through Fulbright appointments. And yet in our organized projects many critical needs have not been foreseen. The best way to understand what it takes to plan a

project is to compare one which was thoroughly planned with others deficient in their preparation

The task of helping Indian teachers' colleges start retaining high school teachers through extension center workshops, which Ohio State undertook through an ICA contract, was excellently planned. The need for change in high school teaching was thoroughly accepted at the high level at which India plans by the Planning Commission, Parliament, Cabinet. The objectives of change were spelled out in the authoritative Report of the Secondary Education Commission. Meanwhile experimentation with methods of working toward those objectives had been conducted by the Ministry of Education, using some American specialists supplied by Fulbright and Ford Foundation programs. In consultation with Ford Foundation and TCM education advisers, the Ministry created an organization expressly to carry forward the promising methods. This All India Council of Secondary Education had money, staff and enthusiasm to do what the Ohio State team arrived to help it do. The American group leader credited much of the team's success to this thorough preparation.

The first requisite for such planning is command of the professional knowledge of the field of work. A vital deficiency of the Fulbright program in India is that projects are selected annually for Fulbright research or lecturer appointments in such widely scattered fields as aesthetics, philosophy, physical education, theoretical physics, Sanskrit, urban demography, tropical medicine, public administration, and survey research methods without benefit of the careful scrutiny of the needs of each professional field in India by professionals. With this serious handicap it is possible to send Americans to already strong departments or institutions with some hope of their being well used, it is almost impossible to know what new or weak institutions can do with them. Since precise standards cannot be drawn for selection, the fit of the man to the position is unplanned. This is the source of a good deal of the personal frustration reflected in the terminal reports of Fulbright appointees.

TCM with a large organization in India can afford full time professional staff in several fields in which it has contracts agri-

culture needs to find itself, it is certainly better to let it do its own borrowing.

To state this is, however, to point to the potential hazard of all foreign training programs for participants from rigid hierarchies and crusted status systems. Will they have a chance to express what has become part of them, on their return? For the individual "foreign returned" Indian, this is an ominous doubt, whether he has studied abroad under Fulbright, government, or even sometimes foundation auspices. Much less so for the participant in a college contract program, or in INSTEP. The steel mills are starting fresh, with the technological imperatives of steel making opening the way for the man who knows what to do. Contract participants go back to institutions selected because they have promise for the innovations decided upon by the Indian government, and watched over by Indian and American observers sympathetic to them. More use could be made of short term visitations to America by Indian college principals who do not yet fully share these goals. Even so, only one participant interviewed in this study had not found an opening for what he wished to do when he got back. Participant training minimizes the usual hazard of foreign training precisely because it is organized as part of a larger scheme of program development, including the use of joint policy planning teams and American specialists overseas. Isolated, it would face the ordinary risks of frustration.

PLANNING AND OVERPLANNING

Proper preparation of a project is the most general and the most serious need detected by the Americans working in India. Those who come on organized college programs, by definition, benefit from a great deal of prior consideration and agreement which is not even attempted, for instance, in deciding upon positions to be filled through Fulbright appointments. And yet in our organized projects many crucial needs have not been foreseen. The best way to understand what it takes to plan a

The third requisite is a working knowledge of India on the part of American planners and of America on the part of Indian planners Let us consider this from the American side The reorganization of state boundaries provided the main upset to the first year's working of the land grant college regional contracts Indian customs duties on materials supplied under ICA contracts to private colleges was one cause of delay to delivery of equipment needed to start some assistance projects Allahabad Agricultural College, a mission institution, could not be a strategically effective demonstration of the new concepts of agricultural education Only people who knew India could foresee these things, even they, of course, only partly

The lesson of our cases is that each decision in planning, if it be sound, must achieve a synthesis of all three kinds of knowledge We see this clearly in the planning of the new home economics contract Discussions between TCM and the Indian Ministry of Education were not informed by professional vision of the alternative aims confronting home economics in India and the strategy of building up this particular discipline When two deans of home economics visited India on behalf of the contracting university, the TCM-Ministry discussions had already hit upon a pattern for deploying the new contract team It is very difficult for a professional person who does not know India, or know the considerations involved in the proposals of particular government officials, to substitute his judgment for this kind of pattern Because true agreement requires joint exploration by planners of both nations, because it must be continuous to keep up with changes in the host and contracting institutions, because it requires knowledge of India, project planners must be continuously on the job in India The universities must appreciate this fact But planners must, equally, know what they are doing in a scientific or professional field The administrative need is for more flexible and continuing relations between universities and foundation and government staffs in India than have yet produced organized college projects

The people concerned with college programs in India do not need to be told the importance of thorough advance preparation

culture, veterinary medicine, education Engineering and home economics have not been as well planned partly for lack of policy-level professional staff. The Ford Foundation, with a small permanent staff in India, gets a still better grasp of the professional requirements in the subject areas of its projects through the use of *ad hoc* consultants

The second requisite is genuine agreement on the need for and feasibility of the project between Indian and American authorities at all the levels where decisions will be made "Successful advice," says Douglas Ensminger of the Ford Foundation in new Delhi, "requires the desire to be advised" Two of nine host colleges for the Tennessee home economics team did not really accept the goals of the program When horticulturist Blackmon reached Indore there simply was no possibility of a horticulture program there Agreement had been reached by the survey team months before, meanwhile the personnel or situation had changed Likewise, at a higher level, a new Minister brought a new concept to bear on the secondary teacher training project, one which promised to undo much of the earlier understanding on which the American assistance had been based. From the Indian point of view a land grant college team's insistence upon an American pattern of relating extension to the agricultural college in the face of the findings of Indian administrators who themselves had examined the American model must seem equally frustrating At the other extreme are the cases of genuine agreement on aims and methods the nation wide recommendations for agricultural education of the Indo-American Team, the development of an agricultural university in the state of UP, extension centers in the teachers' colleges, at the individual level, home economics inservice training workshops, collaboration on agricultural textbook writing, pilot projects for grasslands conservation. The single characteristic of all these cases of project development was that Indians and Americans worked alongside one another while the aims were identified and the techniques hit upon. The exploration itself was joint. The evidence leads us to doubt whether genuine agreement can be had through any other approach

the foreign agency sponsoring the project (should have) a special contribution to make in view of its experience or expert knowledge, The actual work of investigation, the subsequent processing of data and the drawing up of reports should be planned in consultation with a person selected from one of the Indian universities or research institutions on advice by the Research Programmes Committee

Whatever expenditure is necessary in India for carrying out the field work or any other work connected with the project approved by the Research Programmes Committee should be found from the funds available to the Research Programmes Committee *

The Planning Commission of the Government of India is probably more cosmopolitan, and free from a defensive attitude about social problems in its nation than any analogous body anywhere in the world. The hazard of overplanning is not that it will visualize a research proposal and disapprove it, but that busy government policy makers will not be able to visualize an academic research proposal until it can be carried to conclusion. The Research Programs Committee is a body of Indian social scientists mainly from the universities. Asking it to advise on which Indian social scientists or institutions should collaborate on the foreign sponsored project is at least as time consuming and possibly as inconclusive as putting the same kind of question before a committee of the heads of social science departments of American universities.

The procedure applies to organized research proposals, and those involving direct field collection of data. We have seen that only one such proposal has been carried through in India since 1954 (the new MIT economics project) and that without formal clearance under this procedure. One hopes this precedent will hold for future research proposals. For, if an American analogy may be introduced, one wonders whether had such central semi-governmental planning and review of social science research

* Quoted from the full text in the note supplied by the secretary of the Research Programs Committee, *South Asia Studies Newsletter*, No 4 June July, 1955

schemes existed in the United States at the time, it would have been possible for the Swedish scholar, Gunnar Myrdal, to proceed with the large scale field investigation which resulted in *An American Dilemma*

UNITED STATES GOVERNMENT ORGANIZATION

Not a trace appeared in this study of incompetence or lack of zeal in the government personnel responsible for technical assistance in India. But the system of *administration* within which they had to work was utterly unfit for the job

This is a problem which cannot be detailed here. The general outlines of the difficulty are, however, evident. The United States government, operating domestically, has involved itself in certain routines of financial accountability and (for new or controversial programs of administration) political accountability to members of Congress. These do not work too badly at home, since beneficiaries of the substantive programs let Congressmen know if the procedures get seriously in the way of performance. There is no such built-in check upon excesses of procedural delays in overseas administration. Moreover, delays which are inconvenient at home may absolutely nullify a program abroad, where the host government's needs are dated, and the opportunities to help even more so.

One might have thought that the administrative virtue of a university contract lies in freeing the foreign aid project from precisely these procedural delays. Not so. The United States, which makes large grants to universities for their domestic programs upon their own financial responsibility requires that, overseas where flexibility is needed, they fit into government accounting and auditing routines. This is probably the greatest single obstacle to the enlistment of desirable universities in contract programs. To be sure, some of the first group leaders sent out to India failed to come to grips with their financial responsibilities. TCM had to employ a university contracts business manager (a former university business office man) to help them out.

and make sure they got started properly Now overseas university teams can avoid breaking government fiscal rules, they can't administer a university program under university rules

It would be quixotic to suggest that the ICA could turn over more latitude to the universities without a reckoning with Congress This brings us to the second and much deeper incapacity of the United States government to use universities overseas It cannot decide the administrative questions on which project success depends It cannot decide them because those who have the power are not confronted with the choice

Actually, within its present fiscal authority, the ICA gives firmer commitments to the universities than it can give its directly-employed technicians A university contract constitutes a two year claim upon annually appropriated funds To ICA, interested in continuity of work abroad, this is one of its virtues But in order to staff its contract positions, in this time of mushrooming college enrollments and a seller's market for faculty specialists, the university may need a commitment for the life of the contract, e.g., five years To take another aspect of the same problem, a university may need a quick decision from ICA as to whether a contract is to be entered or renewed That may be the condition for holding its key staff, even the member of the survey team who is slated to be group leader (as happened in the case of Kansas State College) ICA simply has to get too many clearances

What is needed is a special form of government organization competent on its own, subject to a much broader Congressional control than now exists, to make commitments to universities and the governments of foreign countries Such an agency would have to give increased powers of decision to its country representative (the director of TCM in the case of India), this is the cure for "overplanning" in terms of quantities at the expense of responsiveness to potentials in the subject field and the country concerned This is not the kind of recommendation which can be detailed from the experience of India alone Indian experience, however, amply demonstrates its necessity

In working out the needs of the Second Five Year Plan, 1956-1961, the shortage of college trained engineers was estimated at fifteen thousand men. Roughly, this meant a shortage of one thousand engineering teachers at the college level by 1961. In 1957, having had four years of experience with American engineering faculty assistance through university contracts, the government of India asked the United States to provide more help of this kind, to train some of these teachers. A well thought out scheme was developed to concentrate this advanced training in five strong Indian engineering colleges, to give fellowships to four hundred selected engineering graduates who would not only get masters' degrees, but understudy the American professors and do practice teaching under college supervision. Two years after the Indian request, in the summer of 1959, the first American university contract was signed. It was June 1960, three years, before American faculty members could be got to India under this program. That leaves one academic year before the end of the Five Year Plan.

Incidentally, Russia has completely met the quota of foreign staff requested by India of UNESCO for a new institute of higher technology established in Bombay. Indeed, the first Russian team arrived before the Indian government could open the college, and the second team is now in India. Technological training for India is certainly viewed by the USSR as an active front of competition with America. The United States government has met the competition vigorously in training Indian engineers in America as this could be done without institutional changes. To get American engineering faculty to India takes departures from regular administrative precedents in the government. This has not been done.

One more point must be made about this situation in fairness to ICA and Congress. The sort of reorganization of foreign aid administration contemplated here cannot be justified for a temporizing national foreign aid policy. As long as foreign aid to countries like India is held up to the nations as an extension of the Marshall Plan idea (amidst the slogan "Trade, not Aid"), as a balance to military aid, or as mere competition with the

foreign economic program of the USSR, no case can be made for adequate administrative powers. Here, as often in Washington, what looks like a defect in administration is in fact failure to make a policy choice. We do not know what we are trying to achieve in India, and we cannot therefore calculate how much of what kind of aid it will take. That is why we cannot organize the government to give that kind of aid.

THE AMERICANS IN INDIA

There are two questions one might ask about the quality of the Americans who went to India in the programs we studied. One is of their absolute excellence. Some Indian observers do this, going on to conclude that India does not receive the cream of American faculties. As one examines the organized project member at work in India, however, it becomes plain that competence has meaning only for the job that is there to be done. An animal husbandry specialist from a modest sized agricultural college in a mountain state is, for instance, doing a fine job instituting scientific dairy herd management and dairy instruction in a small new Indian agricultural college. It is therefore the question of competence for the project that is asked here.

On nine projects we studied eighty Americans working in India. The fourteen UCLA students were all highly competent for the summer's job they did, but we can set their cases aside as raising lesser problems than the senior people who worked professionally in India. These fall into two groups. There were thirty-six ICA contract "technicians." Information sufficed to form a judgment of about thirty of these. Four lacked professional qualities required by their assignments; one fell short as a group leader, one demonstrated no interest in his assignment, two were not trained in the required specialty, though one of these was perfectly competent in another line which the contracting university understood was required. Three others had personalities which were too prickly for work abroad, one of them was quickly sent home. Five more were too old, they had

retired as professors at home, and they lacked vigor to tackle a fresh job This particular disqualification, incidentally, is a problem peculiar to ICA university contract "technicians" Neither TCM in its direct employment, nor any foundation hires men with so easily discernible a handicap

Twenty university contract appointees out of thirty were generally competent As our case studies suggest, some of these were outstanding The Ohio State education team and the University of Tennessee home economics team each had only one unsatisfactory placement. The conclusion is not that Americans on ICA university contract assignments are substandard, but only that the lower limit of quality should be raised, and insisted upon by the contracting universities much more firmly than it is now

If we compare the ICA contract people with Americans in India under other auspices this conclusion becomes much firmer Only the Oberlin-Shansi Memorial Association program had as serious a staffing problem All eight of the MIT appointees turned out to be thoroughly qualified Doubt might be raised about only three of the thirteen Cornell project personnel and this doubt concerned how they were used, not their competence Clearly universities do a better job at staffing projects which they conceive and which more directly serve their own purposes There is nothing surprising about this, it does again bring into question the contract which calls only for helping India as against combining this with the pursuit of knowledge

The standard term of service in India for contract people is two years though a few stayed one Only two of the thirty-six in our study were reappointed for a second two years Two years in practice means twenty months on duty in India It is the bare minimum in which a "technician" might size up the situation, get his equipment, help select his "counterpart" for training in the United States, and still have some time to work with him when he returns to India Whether two year appointments suffice for program development, however, is another question Can a new department be established and stabilized in two years? Professor Ralph Hay did it, he was working in the Indian Institute

of Technology, which of all Indian colleges gives the department head the fullest responsibility Dr Reeve Betts spent twelve years at Vellore, another good institution but less oriented toward Indian self-reliance The range of time required in other colleges probably falls in between

Under present terms of employment, American faculty members are not available for overseas assignments of more than two years India's needs call for some longer term appointments of foreign consultants These are India's most crucial needs, and America's opportunities to leave the deepest impact Consider, for example, roles of adviser to the deans and adviser to the vice-chancellor of the entirely new agricultural university in UP Can India get adequate help in fixing the character of this institution from consultants staying two years? Perhaps more realistically, can such men be spared from their institutions longer than a few months?

India's long term experience has been that the term required for a foreign specialist to be useful gradually declines from a lifetime in the colonial era to a few months or years today If we extend the generalization, we can suppose that there are many underdeveloped countries needing most, not just a few, of their American specialists on appointments of more than two years If so, then the universities are as neglectful as the government in facing up to the administrative innovations required when they take on an overseas assistance program Even the limited experience of India suggests that there is need for a small but significant part of the work of program development to be done by men who can stay not quite so long as Arthur Mosher or Reeve Betts but as long as Frank Parker or Douglas Ensminger have stayed Is there no way such men can become available to a university to steer its country's team? Is there no way such men can feed their thorough knowledge of foreign institutions and the process of development back into university graduate training, as Dr Mosher did at Cornell?

THE ROLE OF THE UNIVERSITY

Success of an organized college project in India depends on the college, the foundation or government sponsor, and the host country institutions. Whichever of these conceived the project as central to its purposes, however, properly receives the primary credit or blame, it bears the responsibility for getting the cooperation of the others. Colleges have been in this position only for the research and educational projects, not for the service ones. But if one disregards the question of credit or blame and asks how well each party has fulfilled the assignment it undertook then clearly the colleges have done least well. They have not succeeded generally in (1) getting good group leaders in India, (2) recruiting enough competent Americans to go abroad, (3) mobilizing all university resources toward the project, nor (4) making creative contributions to program planning.

(1) All the nine college programs we studied maintained teams of Americans in India. Certain things had to be done in India for the team. One member's belongings caught fire on the railroad car en route for home. Another's baby died at birth. A third was told that the United States government did not consider his grandchildren dependents for purposes of paying their transportation to India under the ICA-university contract, though the university that employed him had told him otherwise. Were he at home, the faculty member would be surrounded by a myriad of relatives, friends, colleagues, associations, commercial services and administrative authorities to help him meet these major and minor crises. In India they descend on the group leader. Beyond this, if the team's task is a collective task—and in greater or less degree all nine were—there is a professional job for a leader. He needs to get and keep a concensus as to aims as the group on the spot sizes up the unpredicted aspects of the situation in India. He needs to maintain relations with the American sponsor and the Indian sponsor of the collective project such that work can go forward. He may, in addition, need to be the home university's business representative in spending contract or grant funds.

One way to size up what the group leader's job has become is to compare it with university posts at home On the administrative side, his job compares to that of a department head as to the size of his staff and program, to that of a dean as to its diversity To be sure, he does not have the department head's—much less the dean's—responsibility for recruiting, promoting, and determining the salary of the American team members, that is done in the United States But because the real (though perhaps not the formal) mission of his team is program development in an Indian institutional context, he carries a somewhat analogous burden when he helps decide which Indian institutions to support or which Indian faculty members should go to the United States for training On the personal side, the demands on him are often more picayune, but occasionally they call for qualities of psychological leadership without the props of a familiar institutional structure

Except for the small Oberlin Shansi Memorial Association project (where, too, plans have been made to this effect in the future) all nine of the college programs we investigated recognized the need for group leaders But in only five cases did they succeed in getting men to India who in fact carried the responsibilities we have identified above, and in two of these cases the effective group leader served only part of the duration of the project The deficiency, where it existed, had two serious consequences Whenever the group leader failed to anticipate and solve managerial problems of the project in India, these descended on the sponsor—the foundation representative in India or the TCM The university thereby surrendered its claim for autonomy in administering the contract or project in the field Second, the group leader, as the only man in the university staff who might combine professional knowledge with detailed knowledge of the situation in India, ordinarily had a weak part in making major program plans, such as those involved in contract renewal

(2) The universities which took on ICA contracts proved unable to recruit enough competent people to man them One reason, we have seen, was that the ICA failed to make the bold

administrative innovations necessary to make recruitment possible in fields of such chronic shortage as engineering. But the colleges themselves differed sharply as to their determination to carry out their recruitment obligations. The extreme case is of a contracting college which did its recruitment of American technicians to serve in India through an advertisement in the *New York Times*. The resulting candidates, whose appointment the college proposed to TCM and the Indian authorities without interviews, were a naturalized Russian, a Japanese national, and an Indian national temporarily in the United States. ICA later cancelled this contract. At the other extreme is Ohio State University, which staffed its team entirely from its own college of education.

The evidence of our cases does not support the contention that the better individual technicians are drawn from the faculty of the contracting university itself. Of twenty-nine ICA contract personnel for which we have information on both general competence of performance and origin, ten out of fifteen of the technicians supplied from the contracting university were rated as competent, compared to ten out of fourteen of those recruited from outside the contracting university. The home campus supplied forty-one percent of the technicians in the contract projects we studied. But there is ample evidence that a team composed wholly or largely of the permanent staff of the contracting university has the solidarity to function in fact as a team. If one ranks the teams upon their sense of collective responsibility, and upon the proportion of their members supplied from the home campus, the rankings are identical. Certainly a contracting university would seem to be abdicating much of its responsibility for the morale and zeal of the team it sends to India if it does not supply the group leader from its own faculty. The performance of the one team that suffered from this handicap bears out the supposition.

(3) One lesson that all contracting universities learned out of the sometimes frustrating experiences of the first round of ICA contracts was that the decision to take on such a project in India must be an all university commitment. This it takes to

solve the recruitment problem just discussed A strategic department head or associate dean will not be released from a university faculty to work two years in India as a group leader, nor will vigorous senior professors be spared for the team, unless the president and the board of trustees are fully convinced that the project is in the interests of the university Of five land grant college contracts and three engineering education contracts, in only two cases did the dean of the college immediately concerned attach high priority from the start to the job in India, in the remainder of the cases professors in one or two departments got the university to take on the job The deans came to grips with the problems of making the contracts work only after they had made inspection trips to India in 1958

The other consideration is that only by drawing humanities and social science departments into some relation with the Indian projects of the departments of education, engineering, or agriculture can the university hope to capture substantial direct benefit from contract work for its own teaching and research purposes A university can help India through its technical and professional colleges, it can get new knowledge of scholarly value from India through its philosophy, comparative literature, language, anthropology, sociology, economics, political science, geography and history departments So far, no university has succeeded in relating the two efforts to support and guide one another Of course, only now are university-wide administrators beginning to enter the planning of India programs

(4) Historically, the UCLA Oberlin, Cornell and MIT projects in India were conceived on college campuses for educational purposes, the ICA contract projects were conceived in Washington and Delhi for service purposes University ideas left a mark on the broad strategy of contract programs in only three cases The Ohio State agriculture team, largely an Ohio State group, worked out an interpretation of the relation of agricultural education to extension which fits its region of India Associate Dean Harold Hannah as group leader, and later on, the vice president and other University of Illinois policy makers helped inspire and shape the idea of a new agricultural university

in the state of UP The University of Wisconsin dean of engineering campus coordinator and vice-president had a hand in the strategy of the present new engineering contracts concentrating on training Indian engineering faculty Otherwise, the universities functioned to assemble teams of technicians, to buy books and equipment, to train Indian participants They did not function to discover educational policy adapted to India

For this there are two reasons having to do with the administration of the contracts, as well as the fundamental lack of a university commitment to the projects at the start In few cases did the university survey teams which visited India before the original contracts were signed include deans or other policy-level university people The fact that Dean Jessie Harris of the University of Tennessee made the survey visit is perfectly evident in the work of the first home economics contract the team was from the start concerned with the broad strategy of developing a new discipline in India

The second reason was the extremely narrow use made of college administrators when, towards the end of the first round of contracts and the start of negotiation of new contracts in 1958, they did come out to India Busy deans of agriculture and engineering who made these visits became interested in helping India, they learned the administrative lessons of their teams' experience Except as noted above they were not called on to join Indian host institution administrators in thinking through India's new needs in their fields, and planning the best strategy to use American help to meet those needs Had they been challenged to do that while they were in India, they could only have succeeded had they been advised and assisted by (a) a group leader who had from the start got the entire team to think collectively on these matters and to formulate program suggestions growing out of their combined experience, and (b) economists, sociologists or others in the university who had developed systematic ways of interpreting the Indian situation as a whole How far short of each type of advice these administrators fell we have already seen. The result is that at the scale of the discipline or region of India covered by a contract, there has been no counter-

part to the report of the Indo-American Team on agricultural education at the nation-wide scale, no report in which American university administrators who knew India agreed with their counterparts, the policy-making administrators in Indian colleges, on what needed to be done, and how to do it Such university participation in planning university projects in India was not to be expected at the start That it has not been generally possible after three or four years of contract work in India as university contracts have come up for renewal is telling evidence that these are not yet, in the true sense, *university projects*

India is not a government, it is four hundred million people with their goods, their habits of life and associations, their ideas America, in a different way, is equally multifarious and indeterminate It is no coincidence, therefore, that even before India had a government of her own, American contributions were being made to Indian education through entirely non governmental relations of church missions to schools and colleges in India As India began deliberately to plan her future through government, and as America officially recognized certain points of interdependence with India, official programs overshadowed voluntary ones But much of America's talent to contribute to India's plans belongs to her colleges—some private, some public but autonomous These the two governments agreed to use on behalf of the official plans, in the officially declared areas of common interest

This use of university staff and training facilities has, on balance, been more effective for these purposes than the United States government could have been with its present organization and methods of decision had it recruited specialists directly It has not generally been so effective as have foundation programs of recruiting specialists directly for work in India, nor as effective as United States-employed staffs of specialists might have been had the United States government organized itself afresh for this work

Meanwhile, strong impulses came from both countries to find areas of common interest outside the official plans and priorities

Indian students were going in great numbers and under varied auspices to take graduate work in America, professors visited in both directions. The Fulbright program gave government sanction and support to such individual or college enterprises. But each country presents to the other a culture which has its own kind of unity, and which does not readily yield explanations of itself to individual and short-term researches or exchanges of professors. Philanthropic foundations succeeded in a few cases in organizing fruitful scientific or educational projects in officially unrecognized areas of common interest. But they did not use American universities as the organizers.

For ten years there have, meanwhile, been occasional attempts by universities themselves to gain in India systematic knowledge they need for their limitless purposes of learning and teaching. They believed such knowledge might come to be useful to India, though this usefulness might not be demonstrable at the start. Two of these attempts got underway. One completely fulfilled the theoretical promise of such a university-planned, knowledge-seeking endeavor, the other reached some of its objectives, failed in others, as have university technical assistance contract programs. Though American universities have since discovered a much enlarged need for knowledge of India in graduate and undergraduate teaching, the few later attempts to get organized knowledge of India in India have come to naught. One reason is that the Indian government has seemed, at least formally, to desire to encompass such attempts in the priority-setting function of its government development plans. Another is that not all American universities recognized that studies of people do have the power to influence them, and should therefore be planned with a certain prudence.

Only exceptionally (in one case of our nine) have universities functioned with relation to India as *universities*. This has meant, for their assistance efforts, that they have not been committed deeply enough to supply enough people of the rather high competency required to do the job. More serious, it has meant that they have only rarely been able to join Indian universities in doing what every university worth its name does at home to

conceive and test out and demonstrate the worth of new ways of getting and spreading knowledge—ways that could not possibly yet appear on the agenda of legislative or administrative policy-making without such experimentation

The university as an institution which deserves scope for spontaneity, not because it is unconnected with society, but because it has its own sensitivities to what society is and needs, is by this curious combination of circumstances not now being enlivened in India by the extensive activities of American universities there. It is not being enlivened in America (with one exception) by new scholarship coming from organized programs in India. We ought not be content with this state of affairs because it does not truly represent the American university in India. We ought not be content with it, more fundamentally, because India, in the whole sense of four hundred million people with their heritage and their hopes, eludes comprehension in terms either of development plans or desultory individual scholarship. The university is our select instrument of organized analysis. We cannot do without it to discover the unsuspected meanings India in this whole sense may contain for our understanding of mankind. Mankind's varied answers to the old problems of building civilizations, but also to the new questions of awakening peoples. This question, for example, if people in a poor and crowded country want the science that originated in Europe, must they reject the ideals born there? Or are ideals, as our heritage holds, universal? We can hardly expect our official definition of the common interests of the two nations to be more durable or exact until we begin to learn what America, 175 million people with their heritage and hopes has to do with India. That learning will not, one hopes, long be confined to books, research papers, and the ideas students get of the world from their professors. But it is surely likely to begin there.

APPENDIX A

Two Church Mission Programs

I ALLAHABAD AGRICULTURAL INSTITUTE

Though it lacks a charter to do graduate teaching, the Allahabad Agricultural Institute in north central India is commonly ranked among the six best agricultural colleges in the country. It is particularly strong in some of the applied fields, including extension training and agricultural engineering. The Institute's enrollment, now four hundred and ten students, grows steadily—twenty-nine percent in the decade since India attained independence. Now forty-nine years old, the Institute is in large measure the creation of Dr Sam Higginbotham, a Presbyterian missionary of remarkable foresight and high educational standards.

One of the innovations the Institute achieved early, and which has now become a goal for a number of other colleges in India, is a rounded, cohesive campus life. Sam Higginbotham's first move toward creation of the Institute in 1910 was to buy two hundred and five acres of farm land on the bank of the Jumna River opposite the city of Allahabad. For sixteen years he reclaimed the gullied fields so that he could start agricultural instruction on a successful farm. The campus is now a community as well as a six hundred acre farm. Three hundred and fifty of the students live in campus dormitories. The faculty has, at its best, a sense of cultivating student capacities. The institutional expression of that is something still rare in India—each student

from his first year has a faculty adviser Telling evidence of this point is the presence on the present faculty of a number of men who got their early training at Allahabad, then went abroad for graduate work, or to other Indian colleges to teach They are back, conscious of the atmosphere at Allahabad in which they were themselves, at an early stage, "discovered" and developed

The agitational spirit now endemic among Indian undergraduates has not missed Allahabad Students conducted a successful but somewhat demoralizing strike for cheaper cafeteria meals in 1957 But the solidarity the students feel is not all anti-administration Each year, for instance, they give their time to a farm improvement or adult education project in some village near the campus

Secondly, the Institute gets its knowledge into use by Indian farmers The 'Allahabad plow' is the standard progressive implement throughout the central Ganges plain Along with other bullock drawn implements it is manufactured on commercial scale at the nearby factory of the now autonomous Agricultural Development Society The Institute's experience in extension led to its selection as the pilot center, in 1952, for the Ford Foundation's project to help India train extension workers for a nation wide village development scheme Extension is taught as a course at Allahabad as it has come to be in sister institutions in India here it is to an unusual degree a mission of every department.

The Institute has made progress in research of practical use to North Indian farmers This was the chief characteristic of Professor Mason Vaugh's "Rain Fed Farm" demonstrations The pilot extension scheme was rigorously evaluated in 1957 as to the comparative effectiveness of its methods Now Dr O B Tandon heads an Institute research committee which allot a small research budget to faculty projects Dr Tandon, an Iowa State College Ph D has been statistical adviser in WHO to the Institute of Nutrition for Central America in Panama Other colleges in India are doing more, and more complex, agricultural research What is remarkable at Allahabad is the high value attached to research considering that the institute is not

authorized to give graduate degrees, and the practical bent of the research projects

Allahabad Agricultural Institute is controlled by a board of directors in India representing the contributing churches and missions A board of founders in New York represents the various supporting mission boards since the Presbyterian church had to seek interdenominational help in financing the Institute in 1947 Foreign support provides one-third of the Institute's operating budget and nine-tenths of its building and equipment funds The board of founders also recruits Americans to the faculty, if possible at the expense of their own churches

An American who goes to teach at Allahabad under mission auspices receives compensation set by his particular mission board In the case of the United Presbyterian Church it is \$3,000 per year for a family man, plus travel, vacation, initial outfitting, Indian income tax, children's allowance, medical care and retirement The whole cost, however, is budgeted at \$6,000 per year This is modest pay, yet another denomination the English Friends, provides half as much

Traditionally, the mission term of work in India has been five years followed by a study leave of ten months, and further five year or six year terms followed by ten or twelve month furloughs Recruitment difficulties prompted some mission boards to consider three year terms with three month furloughs

By 1958 however, American missionary personnel had almost disappeared from the Allahabad faculty In 1937 there were fifteen Americans, now there is one Partly this represents deliberate Indianization Partly it represents difficulties in getting Americans to India difficulties of recruiting at mission salaries in such fields as electrical engineering or home economics, difficulties of getting Indian visas for appointees of mission boards

Almost half of the Allahabad faculty of sixty five has received foreign training Twenty-one have masters' degrees from American universities, five have Ph D's Such training is formidably expensive to Indian budgets, but the Allahabad staff members have found many sources of financial assistance United States government (ICA) funds supported ten of them at the Univer-

sity of Illinois in the early phase of an organized program of that university in India which we have examined above The Rockefeller Foundation awarded fellowships to four, smaller foundations to five more Assistantships direct from American colleges supported three, one of whom got a Fulbright travel grant as well, one got a direct ICA grant Only one man was supported in foreign study principally by a mission board, three partly by Allahabad Agricultural Institute Almost all these opportunities have opened recently, only four of the present Allahabad staff took their foreign training before India's dominion status in 1947 This mission founded and mission-supported institution has now, in its methods of developing its staff, come very close to the practices of the other progressive private agricultural colleges in India It is foreign graduate training, no longer foreign missionaries, that develops professional skills

The distinctive character of Allahabad's development is to be found in another source During its first twenty years the Institute was the creation of one man, Dr Sam Higginbotham In the early phase of his career, while teaching economics as an ordained missionary at Ewing Christian College in Allahabad, Higginbotham grasped two fundamentals agriculture was the crucial sector of the Indian economy, and the key to improving agriculture was to train teachers He clearly saw the need to give a command of scientific methods to those who could teach future cultivators From his personal vision in 1904 the Institute materialized. He went home and trained himself to the Ph D level in agriculture, he got the Presbyterian Board to sponsor the college, he raised the necessary outside funds Dr Higginbotham's faith entered the traditions of the college "You plan your work," one of the present staff members recalls him saying, "if it is acceptable to God you will get the money for it."

The Institute grew slowly over forty years There was time for the leadership of Higginbotham and his successors, Goheen (uncle of the Princeton president) and Mosher to shape program and leave its bent in newcomers among the faculty Among the American faculty members, a man like Mason Vaugh in the field of agricultural implements and tillage, or Brewster Hayes

in horticulture, could establish not only a teaching department, but a new discipline in India, or at least a new content and emphasis in a budding discipline. Such men spent their careers in India. Institution-building was the task, twenty or thirty years the time-scale. The main tactic was the discovery and initial development in the classroom, farm and extension projects, of young Indian men and women who would staff the Institute.

II VELLORE CHRISTIAN MEDICAL COLLEGE

The government of India, with the support of the Rockefeller Foundation, has recently founded in New Delhi a national institute of medical research and graduate training. Until its establishment, many foreign observers, at least, gave first position in Indian medical education to Vellore Christian Medical College. There would be general agreement on the top national standing of several departments of that college, this is the more remarkable because Vellore is an otherwise obscure town in South India and the Christian Medical College has only been authorized by Madras University to grant standard medical degrees (MBBS, or Bachelor of Medicine-Bachelor of Surgery, is the Indian equivalent of MD) since 1942.

Clearly, the energy and sense of direction of this institution have come from within it. Like Allahabad, it is the creation of a single strong personality—in this case Dr Ida S Scudder, who arrived in India with her medical degree in January 1900. But Vellore has long since become a living institution with motives and methods of work through which the energies and purposes of many people can be channeled. These motives and methods we can see working even in a single case of a present department head, Dr Reeve H Betts of Thoracic surgery.

Dr Betts has completed ten years at Vellore. He left a practice of chest surgery in one of Boston's outstanding clinics on the strength of a small advertisement in the *Journal of the American Medical Association* calling for teaching medical missionaries. Dr Betts had never heard of Vellore, which needed a professor

of thoracic surgery to give medical degrees. But he had been interested in mission work even before he entered medical college. He went to the obscure town in South India to start a department of thoracic surgery at a salary of Rs 500, plus Rs 25 per child per month.

"My family was digging in the soil," he recalls, "and figured at that rate we could last five years." But after three years the Methodist Mission Board took over Dr. Betts's support from his own Baptist Church, and he began receiving Rs 1700 (\$357). Vellore pay has now, thanks to a five year grant of the Rockefeller Foundation, been standardized at the scale recommended for Indian faculties by the Indian government. The mission boards add furlough and retirement compensation, which may, of course, need to be much higher to meet American costs and scales of living.

Dr. John S. Carman, director of the college and hospital, recalls that it took Dr. Betts three years to get his department started. A blood bank had to be established, for instance, heart and lung patients had to be drawn to the hospital. Other new department heads, less adept in human relations, took longer. But getting the department ready to turn over to Indian professors is another matter. "Five years is not enough," says Dr. Betts. "We had hoped to achieve our main objective, turning over to an Indian head, in ten years. Now we have two men, both of whom are ready to take charge. But we had to postpone my going home until Madras University accepts their credentials. It will take another two years. By that time our oldest children will be ready for college, so we are anxious to be back. And at 52, I cannot wait much longer to re-establish my practice in Boston."

Not all the Americans at Vellore have been giving so high a priority to preparing Indians to take over. One department head, for instance, has been there twenty five years. But she is now working as consultant, her assistant has taken administrative charge. Nor has a positive policy of Indianization always been capable of execution. Dr. Carman stays on in the top position strongly against his personal desires as well as his aims for the

College The Christian Medical College has found an Indian principal and the hospital an Indian medical superintendent, but no overall head had, by the end of 1958, been discovered

Quite evidently, Vellore has something to teach us about how to attract men like Dr Betts and the other dozen or so men of international calibre from America, England, Germany and Australia to long term jobs in India. Dr Betts himself suggested that "surgeons are enterprising characters" Vellore does seem to have found it easier to draw surgeons from American careers, or to draw staff members from medical colleges and hospitals, than to draw American doctors from general or individual practice. But even to this there are two outstanding exceptions. The explanation for Vellore's attractiveness must lie somewhere among the following factors.

(1) From Dr Ida S Scudder's small start in 1918, when fourteen out of eighteen of her women students passed the state medical license examination, Vellore has maintained high academic standards. This must in itself have been attractive to good teachers.

(2) The needs for medical attention are so limitless and so acute in India as to give one a vivid sense of the contribution he can make. To illustrate the orthopedic surgeon, Dr Paul Brand, developed at Vellore a technique for grafting new tendons onto the fingers of cured leprosy patients so that they could use the hands that had been eaten away. One of his patients came back to him some months after the operation, saying with considerable bitterness, "I am cured, so I can no longer beg. But neither do I know how to do any work with these new hands. What good are they?" Dr Brand has now established a Leprosy Rehabilitation Center where these people learn to use tools to make a living. The medical student's cliche about "serving suffering humanity" takes on life in India.

(3) The Christian Medical College is managed with an intense interest in the human desires and potentialities of its staff, and with a cosmopolitan breadth of view toward them.

(4) Vellore offers opportunities—varying, to be sure, among its departments—for doing original professional work. Dr Betts

thoughtfully summarized for me the advantages and disadvantages of working at Vellore for the man determined to 'keep up' in his profession. The "clinical material" is there. "It has proved surprisingly easy to get the new patients we needed, and to get the beds for them. The college-hospital relation is favorable."

"Our furloughs are too far apart (five years) to permit us to maintain all the professional contacts we need, they last too long (usually ten months) for us to be away from our work at Vellore. We have to learn of professional advances entirely by reading, we can observe and discuss new practices only during furloughs."

Dr Betts said that though the American organization MD International has raised funds to provide a heart lung machine which should permit open heart surgery at Vellore in 1960, "we still do not have equipment for all the latest operations." One of his colleagues told me that some of the Thoracic Surgery Department equipment has been paid for out of a fund established by Dr Betts's fellow doctors in Boston, who tried first to dedicate it to the education of his children, and on his refusal put it into equipment for Vellore.

"The difficulties are offset by the types of cases we get. We could match them only in the largest American hospitals, and even there we would not get cases in such extreme stages."

Dr Betts supplied a list of professional articles he and his Indian colleagues in thoracic surgery at Vellore have published over the last ten years. Forty-six have appeared in Indian medical journals, eight in American and British journals. Among the things a man gives up to work at Vellore is not his professional creativity.

APPENDIX B

American Faculty Grantees Under the Fulbright Program

Through the academic year 1958-59, two hundred and eighty-four Americans were sent to India, and eight hundred and fifty-nine Indians to America by the United States Educational Foundation in India. This organization administers Fulbright Act funds, foreign currency (rupee) funds remaining from the settlement of World War II surpluses. The original inter-governmental agreement of 1950 set the annual amount available at the rupee equivalent of \$400,000. While the money has been about equally divided between sending Americans to India and Indians to America, the number of Indian grantees is three times as large since the rupee fund can be used to pay only the travel of each one.

The Foundation is supervised by a binational board. Administration has been in the hands of Dr Horace Poleman, Sanskritist and present chief of Orientalia for the Library of Congress, Dr Isabella Thoburn, and Dr Olive I Reddick, who has served longest and is now executive secretary. All have been "old India hands," Dr Reddick having previously taught at a Christian liberal arts college in Lucknow, India. In this respect the Fulbright administration differs from all others sponsoring American college people in India.

In the nine years of the program, slightly more than two-fifths of the two hundred and eighty four American grantees have been faculty people. They were appointed either as lecturers or to do research. Another two-fifths have been graduate

students, many of them getting material for a Ph D thesis in India. Less than one fifth have been school teachers. The faculty grantees are most nearly analogous to the organized American college programs included in our survey. Fortunately, the terminal reports of seventy-eight of the American faculty grantees (over four fifths of those who were in India from the second through eighth year of the program's life) were available in the United States Educational Foundation to provide data for the characterization which follows.

The program seeks a balance among academic disciplines, and in this it has succeeded. Twenty-four of the American senior appointees were social scientists, three natural scientists, seventeen from the humanities. The total, forty-three, represents the standard liberal arts fields. Somewhat fewer were from professional or applied fields: seventeen from education or physical education, five from medicine, four from social work, two each from agriculture, engineering and journalism, one from law. One was not specific as to field of work. This is not, evidently, a program mainly for technicians.

It is, however, rather heavily a program of academic assistance to Indian institutions. Of the seventy-nine appointments (one man was appointed twice), thirty-four were to help an Indian college start a new or revised program, six more were to teach courses about America. The knowledge required already existed in America. Only eleven were clearly to acquire new knowledge—knowledge usually about India. This group included seven Indologists, including Sanskritists and historians of India, as well as men in the fields of philosophy, comparative religion, geography and communications. Twenty-four had projects combining assistance with learning: an example is the oceanographer who conducted original research upon the marine life of the Bengal Madras coast and was asked in the process to help India institute a program of oceanography. The purposes of four could not be determined.

This impression of assistance outweighing learning is sharpened if we examine the methods of work of the seventy-eight senior Fulbright people. One-fourth (twenty-two) came for

research including in that category even one who was merely gathering teaching materials Three-fourths (sixty) taught in India or advised Indian colleges (The total exceeds seventy-eight because one grantee was twice in India, and because three must be counted in both categories of work) Within the second category, twenty-one taught Indian undergraduates, twelve taught graduate classes, seven gave courses of lectures outside the regular curriculum, twelve taught in the United States Education Foundation's special teacher-training workshops, three established new academic departments, five mainly advised Indian deans or college heads

The Fulbright program has certain characteristic features which come from the rationale of its legislation It is a program to get the widest possible person to person contact between teachers and students of the two countries Appointments are made, therefore, for a single academic year There have been several extensions of the ten month period in India to twelve months Only in two cases have grantees been supported for a second year in India, in another case a senior man was reappointed after a three year interval In the case of research appointments, there is no reason why projects cannot be designed for completion in one year The question of the duration of the appointment takes on a different aspect for Fulbright lecturers Can a new department of instruction be established, new courses introduced, or even new course content, in one academic year? The terminal reports of the Fulbright lecturers are illuminating Not many commented directly on the duration of the appointment Of those who did, two said they had succeeded in building a new course of studies solidly into the Indian college Six, however, said nine or ten months were seriously too short 'One year is barely enough to accomplish anything" wrote one of these 'One has to win respect and confidence Two year appointments would accomplish much more than twice as much" Another wrote, "Ten months is altogether too short The investment is too great for so short a time It encourages dilettantes"

The terminal reports contained a good deal of information about the effectiveness of the grantee's work There was his own summary and appraisal of what he had accomplished and the

executive secretary of the United States Educational Foundation had at the time recorded her information on this point. On this aggregate of evidence, the seventy-nine cases (two appointments for one man) were classified as "unusually effective," "effective," and "ineffective." Effectiveness might be due to the grantee's qualities, but also to the situation in which he was expected to work, or the job he was given. The results were

unusually effective	25
effective	39
ineffective	15

The categorization cannot be compared to that of the personnel of organized programs for three reasons: more was generally expected of the personnel of organized programs; evidence concerning their effectiveness was collected from the people on whom they were supposed to have an impact which was doubtless often a more exacting view than one's own or one's sponsor's; and the categories themselves were not meant to be comparable.

The main reason for making this classification as to quality of performance was to discover whether it might be associated with the kind of work a grantee did.

Table 1 shows that there may be such connections, but that they show up between the different lecturer roles, and not between the research appointees and the lecturers as a whole.

TABLE 1 RELATION BETWEEN TASK IN INDIA AND QUALITY OF PERFORMANCE OF AMERICAN FACULTY FULBRIGHT APPOINTEES 1951-1958

Role in India	Total	Unusually effective	Effective	Ineffective
Research appointee	22	7	11	4
Lecturer appointee				
Instructor, undergraduate	21	4	13	4
Instructor, graduate	12	6	5	1
Noncredit lecturer	7	1	4	2
Head, new department	3	3	0	0
Adviser	5	3	1	1
Teachers' workshop staff	12	4	5	3
Total	82*	28*	39	15

* Three appointments are counted twice since each involved two principal roles.

An extraordinarily high proportion of graduate instructors, heads of new departments, and advisers appears as unusually effective Instructors of undergraduates, noncredit lecturers and the staff of the teachers' workshops show lower than their share of unusually effective performances The implication is consistent it is in the more challenging roles that the best performances have been turned in

If we regroup our Fulbright faculty appointments according to the general purpose served by their stay in India, we find no strong connection between the purpose and the quality of performance If anything, those whose purpose was to contribute to India—to teach, advise or set up a department, were slightly better in their performances than those who came to India to gain knowledge This finding runs counter to our findings about the competence of technical assistance as compared to research personnel in the organized college programs This unexpected finding may possibly be explained by considering the evidence in Table 1 In the case of the Fulbright appointments (not of the organized college programs) whatever planning was done by the sponsor was done for the assistance, not for the research, projects And Fulbright administration was ill adapted to select promising research projects

TABLE 2 RELATION BETWEEN PURPOSE AND QUALITY OF PERFORMANCE OF AMERICAN FULBRIGHT FACULTY APPOINTEES 1951 1958

<i>Purpose in India</i>	<i>Total</i>	<i>Unusually effective</i>	<i>Effective</i>	<i>Ineffective</i>
To contribute knowledge	40	15	20	5
To gain knowledge	11	2	6	3
Mixture of the two	24	7	11	6
Unspecified	4	1	2	1
Total all purposes	79	25	39	15